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An account of the yellow fever at New Orleans.
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A

HISTORY OF THE YELLOW FEVER

IN NEW ORLEANS,

IN 1848,

BY DR. FENNER, AND OTHERS.

Hist.

RC211

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THE NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

JULY, 1849.

Part First.

ORIGINAL COMMUNICATIONS.

AN ACCOUNT of the *Yellow Fever at New Orleans, in the year 1848*,
By E. D. FENNER, M. D. *To which is added, Letters on Yellow
Fever, from W. McCRAVEN, M. D., of Houston, Texas; J. B.
PORTER, M. D., Surgeon U. S. A.; P. B. McKELVY, M. D., of St.
Francisville, La.; and W. A. BOOTH, M. D., of Thibodauxville,
Louisiana.*

In continuation of my humble efforts to contribute what I can towards the medical history of the time, I shall, on this occasion, endeavor to lay before the profession, some account of the fevers which prevailed in the city of New Orleans, during the summer and autumn of last year, together with such facts and circumstances as appeared to have a bearing on the question of the *contagion of Yellow Fever*. Altho' the sickness of the season was not so fatal as that of many others, still the year will be remembered, on account of the return of our victorious army from the conquest of Mexico; the greater part passing directly from the infected city of Vera Cruz, the perennial abode of Yellow Fever, to the city of New Orleans, where it only prevails at irregular intervals. The city of Vera Cruz had been in our possession for a little more than twelve months previous to the termination of the war; and being on the direct route taken by the main body of our invading army towards the capital of Mexico, it necessarily became a great

thoroughfare. The intercourse between that place and this, was uninterrupted, and almost incessant, throughout the time. In my account of yellow fever at New Orleans in 1847, I presented to the readers of this Journal, (see September No., 1848,) all the facts I could glean, having a tendency to display whatever connection there existed between the sickness of this place and Vera Cruz. In making my memoranda for the present paper, I had the same object constantly in view, and I sincerely hope that the sequel may serve to throw some additional light upon a point which has elicited more discussion and controversy than any other belonging to the whole history of yellow fever. Hitherto, the sole object of my labors in the investigation of our city's *great scourge*, yellow fever, (which may be found in the preceding volumes of this Journal, from its commencement,) has been to observe and portray, with an unprejudiced mind and impartial hand, all the facts and appearances that presented themselves. I have ventured occasionally to express a few inferences and conclusions, which I thought to be legitimate, but I had no right to suppose they would have any influence upon the minds of others. I have ever believed that a *plain and truthful narration of facts*, relative to any subject, is the most important and acceptable service that can be rendered to the honest inquirer after *truth*. Men are prone to differ in opinion upon all doubtful subjects; but when *correct premises are fairly stated*, most persons, capable of reasoning, will arrive at conclusions very nearly alike.

There are but few men whose *mere opinions* are entitled to much consideration; but *facts*, faithfully gathered from the various fields of observation, are justly considered of inestimable value. These form the very *basis* of knowledge; and he who labors to discover them, like the tiller of the ground, performs the first and most important of duties.

The remarks that follow will be found mainly to consist of *memoranda*, taken down at the date of the occurrences: in other words, it is a sort of *diary, or journal of incidents and events as they happened*. I sincerely hope that this novel method of making up a medical essay, will not prove objectionable or disagreeable to the reader.

I am pleased to find that the most of what I had intended to say about the meteorology of the year, has been anticipated by the Annual Report of the Board of Health, which was published in the March No., 1849, of this Journal, to which I would invite the special attention of the reader. Dr. W. P. Hort, the chairman of the committee who drew up this interesting Report, is not exclusively engaged in the practice of medicine, but is rather an *amateur*, as his leisure in public employment permits, and is indefatigable in his researches into the nature and causes of disease. But that his present employment is more agreeable, and his services so valuable to the General Government, we might well desire to have him back again, in the regular practice of physic. As it is, however, we are constantly favored with able essays from his active and well stored mind.

The Report referred to, shows that the city was in a *most miserable hygienic condition*—that the summer was not unusually warm, and that the largest amount of rain fell, perhaps, ever known in one year. The amount of rain that fell during the year, reached the extraordinary measure of *more than ten and a half feet*; the greater part during the

hot months of May, June, July and August. So much rain, and such a filthy state of the streets, in conjunction with the extraordinary number of unacclimated persons in the city, gave rise to the most terrible forebodings; yet it turned out that the summer and autumnal fevers were of an unusually mild character; so much so as to raise doubts in the minds of many, whether the prevailing fever was really *yellow fever*, or only a peculiar form called *dengue*. I shall reserve my remarks upon this question, as also on the *annual mortality*, for the close of my paper.

I have stated that from the time that Vera Cruz fell into our hands, in the spring of 1847, the intercourse between that city and this, was very great. A number of vessels, both steam and sail, were constantly plying, bearing thousands of new soldiers, with the necessary provisions, to the main line of the army, and bringing back the sick, wounded, and discharged. A few cases of yellow fever were to be seen in Vera Cruz, throughout the winter and spring, but none were brought to New Orleans previous to the date of my first memorandum, with which I will now proceed.

MEMORANDUM, *May 7th*, 1849.—Up to this date no cases of yellow fever have been brought to this city from Vera Cruz, notwithstanding the disease has been there, more or less, all the winter and spring. On Sunday, (7th May) the steamship "*New Orleans*" arrived from Vera Cruz, after a passage of four days, having four or five hundred passengers on board, amongst them about 320 sick and discharged soldiers, under the medical care of Dr. H. T. Fourniquet, a very intelligent young physician, who was educated in this city, and had been on duty in the Military Hospital of Vera Cruz for the last twelve months. I sought an interview with Dr. F., who informed me that sporadic cases of yellow fever are to be seen in Vera Cruz, at all seasons of the year, and that *intermittent fever is very common there*. He thinks that more than half the admissions for *fever* in the hospital at Vera Cruz, are intermittents. He says that a large number of *yellow fever* cases commence as *intermittents*, and that a fever common among the natives and citizens, which they call "*calentura*" is an intermittent. He states further, that many of the fever cases out at the camps, three or four miles from the city, commence as intermittents, but soon assume the yellow fever type, and die with *black vomit*. Dr. F. has favored me with the following notes of two cases of yellow fever, or *vomito*, which died on board the "*New Orleans*" during her last voyage.

Case 1.—About two hours after leaving Vera Cruz, (Wednesday evening, May 3d.) Dr. F. was called to see an Irishman, who, he was told, had been sick about a week. This man had been engaged in the Quartermaster's service, about Vera Cruz, for twelve months past, and had been much exposed to the sun. Dr. F. found him extremely low; his skin was yellow, cool, and bathed in clammy sweat; pulse small and weak; tongue covered with a dark fur; his eyes yellow—hemorrhage from the gums and nosé; petechiæ over the body.

Treatment.—Dr. F. gave him at once, the following: Sulph. quinine grs. xv, blue mass ℥i. M. He also gave the carb. ammonia, and

applied sinapisms. About 9, P. M., the man began to throw up *black vomit*, and died the next morning.

Case 2.—Soon after the "*New Orleans*" started, Dr. F. was called to see a discharged soldier, a native of South Carolina, who had just came down from the city of Mexico, where he was discharged on account of chronic diarrhœa. He was detained in Vera Cruz about five days before the steamer started. He was very much reduced and debilitated. After embarking, he was attacked with a distinct chill, which lasted one or two hours. This was attended with irritability of the stomach, and pain in the head, back, limbs, &c. When Dr. F. saw him first, reaction was just coming on, and in addition to the above symptoms, he found him with yellowness of the skin and eyes, and retention of urine. In the course of the night, he commenced throwing up *black vomit*, and died about 10½ o'clock, the following morning.

In addition to these cases, I will give the following, which occurred in a passenger on the same vessel. I took the notes from the patient himself.

Case.—John A. Bridgeland, aged 21 years; a native of Lynchburg, Va.—quite robust—bilious temperament. Left Baltimore by sea, for Vera Cruz, on the 22d of March; had a long and difficult voyage and arrived at the latter place on the 24th of April. Says he walked about the town day and night, and was a good deal exposed until he started to New Orleans on the 3d of May. Whilst in Vera Cruz, says he was somewhat indisposed with headache and costiveness; he heard of a good many cases of *vomito* about town, and went into the room of one patient to get a drink of water, but retired as soon as he saw the sick man. He was up pretty late the night before he left Vera Cruz. On the second day out, he was sea-sick, and vomited bile copiously. After this he felt pretty well, until Saturday night, the third day of the passage, when the vessel reached the mouth of the Mississippi river. He then found the weather oppressively hot, and he slept without covering, almost without clothes. The next morning he felt very unwell; was chilly; had pain in the head and back and felt some uneasiness about the stomach. He soon had fever, and reached this city about 5 P. M., then feeling very badly. He put up at the Verandah Hotel, and at night, Dr. R., one of our most respectable practitioners, was called to see him. Dr. R. at once pronounced it a case of *yellow fever*, and prescribed a dose of castor oil, and a mustard foot bath. He took the foot bath and some lemonade, but postponed the oil till the following morning.

May 8th.—At the request of the proprietor of the hotel, the patient was removed, and he went to Dr. Stone's private hospital. He took the oil, however, before going out. After reaching the hospital, the oil purged him freely; and the house surgeon, finding then a considerable abatement of the fever, gave him 10 grs. of the sulph. quinine at once; also some bicarb. sodæ and morph. to allay some uneasiness of the stomach. He soon began to sweat freely, and felt much better. The dose of quinine (10 grs.) was repeated in two hours. I now saw him for the first time and obtained the foregoing history of his case. I found him quiet and

easy, general perspiration, pulse about 80, tongue slightly coated, but moist, a white pellicle upon the gums; he had had a slight hemorrhage from the nose—urine rather scanty. At night he took quinine \mathfrak{D} i at once.

May 9th.—Found patient cool, quiet, easy and sweating. He had rested well. Took a scruple of quinine again early this morning. *Evening.*—Comfortable—took nothing.

May 10th.—Rested well; now easy and sweating; pulse 60; urine free.

May 12th.—Completely convalescent.

No other case of yellow fever was seen at this Hospital until after the lapse of five or six weeks.

MEM. *May 10th.*—A sail vessel arrived from Vera Cruz, having left there one day later than the "*New Orleans*." She had no case of yellow fever.

MEM. *May 23d.*—The weather has been very warm, with occasional rain for several days. The "*Eudora*" arrived from Vera Cruz this morning—no yellow fever on Board.

MEM. *May 24th.*—The Steamship "*McKim*" arrived from Vera Cruz, having 106 sick soldiers on board. Two soldiers died of chronic diarrhœa on the passage; *no case of yellow fever*. Reports this fever getting pretty bad at Vera Cruz.

MEM. *May 26th.*—The Steamship "*New Orleans*" arrived again this morning, and brought amongst her passengers the following decided case of yellow fever.

Case.—Joseph Daniels, of Hancock Co., Miss., aged 21 years, of respectable family and very genteel appearance, went to Vera Cruz in February last, and was there engaged as a clerk in a store, until the 22d of May, when he embarked on the Steamer "*New Orleans*," for New Orleans. As far as we can ascertain, he enjoyed good health during his stay at Vera Cruz, but was somewhat indisposed when he embarked; complained of headache. Soon after leaving, he was seen vomiting, and during the passage, had high fever. The boat made a quick passage, and arrived in New Orleans on Friday morning, May 26th. A brother-in-law of Mr. Daniels, who lives in N. O., was soon apprised of his arrival and illness, and immediately went to see him, on board the vessel. He found him very ill and *delirious*. He left him for the purpose of making arrangements for removing him into the city; but when he returned, Mr. D. had left the boat and could not be found. In a state of delirium he had walked up into the city, and was wandering about from place to place. After a while, he was taken up by a police officer, and it being evident that he was sick and not in his proper mind, he was conveyed to the Charity Hospital, about one o'clock, P. M., almost in a dying state. The house surgeon, Dr. W., at once pronounced him a case of *yellow fever*, from his appearance, and seeing the stain of black vomit on his clothes. This became indisputable on the arrival of his friend and learning whence he came.

I saw him about 6 P. M. and found him as follows: he was lying on his back in a state of insensibility; breathing rapid and laborious; skin slightly yellow and bathed in clammy sweat; eyes injected and yellowish; pulse frequent, soft and weak; occasional convulsions; rigors; constant

motion of the head and extremities. In short he was *moribund*. I saw the stain of black vomit upon his shirt. He died in convulsions about 8 o'clock, P. M.

On the following morning I looked at the corpse—it was yellow and presented all the usual appearances of yellow fever subjects.

An *Autopsy* was not permitted.

This was an unquestionable case of yellow fever, contracted at Vera Cruz. The "*New Orleans*" brought over but few passengers, (say 30 or 40) and I could hear of no other case of yellow fever among them. We learn by her that the yellow fever is increasing greatly in Vera Cruz.

With the view of observing the influence of this case upon the other inmates of the ward, (No. 14,) I made the following notes.

There were 12 patients in the ward.

No 1. Next bed to Daniels, was a young Scotchman who arrived here from Baltimore, on the 11th inst. He had had acute rheumatism for the last 10 days, with considerable fever—never had yellow fever.

No. 2. Next bed opposite side, was an Irishman convalescent from typhus; walking about the house; never had yellow fever.

No. 3. An Irishman, only three weeks from Ireland; went to work *ditching* in the swamp, and in 3 days was attacked with bilious fever. Still has fever, headache, furred tongue &c.; never had yellow fever.

No. 4. Never had yellow fever.

" 5. Never spent a summer here; nor had yellow fever.

" 6. Man been here 14 years; says he never had yellow fever.

" 7. Irishman, here 10 weeks; worked on the levee and contracted bilious fever; not yet convalescent.

No. 8. Man, 3 weeks from Ireland—has bilious fever.

" 9. do. 5 months in N. Orleans, has bilious fever.

" 10. Irishman, been in the hospital several months; had typhus and then went to work as ward nurse—never had yellow fever.

2 patients out in the yard—not seen.

So it seems that Daniels died in a ward where there were 12 patients, but one of whom was known to have had yellow fever.

May 29th.—Went to Charity Hospital and visited ward 14; no patient, been discharged since Daniels died; bilious fever cases getting better—no body taken with yellow fever. More new cases of different kinds of fever admitted.

MEM. May 30th.—Steamer "*Edith*" arrived express from Vera Cruz, with the news that the treaty of peace had been confirmed by the Mexican Congress. The "*Edith*" brought no passengers.

MEM. June 4th.—Weather very hot. The "*Virginia*" and "*A. R. Hetzell*" arrived from Vera Cruz. The former brought 30 or 40 passengers—a man died on the passage, supposed yellow fever—no case brought to this city.

MEM. June 7th.—I went to the Charity Hospital this morning, to note the progress of fever. All the fever cases in ward 14 previously noted, recovered and were discharged. *Nothing like yellow fever was contracted by any person in the ward.* The clerk informed me that *intermittents* were evidently beginning to decline, and *remittents* to increase. On looking over the books, and walking through the wards,

I found this to be the case. The house surgeon informed me that he had seen several severe cases of acute jaundice or *gastro-duodinitis*, as is customary in June.

I took the following notes of three cases, showing an approach to yellow fever.

Case. 1st.—James Murray, seaman, native of Scotland, æt. 60, very robust, came from Tampico on the 24th of May. On the 26th was taken sick, but I could not get any account of his symptoms.

June 1st.—Entered hospital, ward 18, then sick five days. The attending physician told me he was yellow when he entered and had but little fever—seemed rather to be in a congestive or torpid state, and was delirious all the time. He died on the 6th June. I saw the corpse on the morning of the 7th. It was yellow all over. I got Mr. Erwin and Mr. Bradbury, two of the house students, to examine his *stomach* and *liver*. They reported to me that the mucous membrane of the stomach was of a dark or slate color, having some blood effused beneath it. There was a little pale mucus in the stomach. The liver was dark colored, and congested. There was bile in the gall bladder. No further examination made.

Case. 2d.—John Hobban, Irish laborer; in the city about 7 months; was brought to the Charity Hospital about 7 o'clock on the 6th June, in a moribund state. He had been found on Villere Street, lying insensible; he appeared to have been vomiting some *dark and bloody matter*, mixed with bits of meat, potatoes &c. He vomited dark matter again after he entered the hospital, which Dr. Barnes and Mr. Marshall thought much like black vomit, from the stain on the bed clothes.

Dr. Barnes thought he might have had hemorrhage from the lungs, and swallowed the blood which he vomited.

He died about 12 o'clock at night. I did not see the body, nor was it examined, as his friends took it away.

This was supposed to be a case of *coup de soleil* or sun stroke. I have heard of several cases of sun-stroke lately, since the weather has been very hot.

Case. 3d.—Michael Loftus, Irishman, æt. 21. Came to this city from Ireland, about the 17th of June, 1847. He was sick with ship fever when he arrived, and remained here in delicate health about a month, unable to do any work. He then went to a plantation, about 100 miles above the city, on the river. He there suffered from intermittent fever throughout the summer and autumn, and returned to New Orleans in the winter, still having chills occasionally.

May 1st.—Went up to Lafayette and got employment in a livery stable, being then pretty stout.

His business there kept him awake, and at work attending to carriages all night, and he slept all day. Whilst thus engaged, he drank freely of ale and porter, but no ardent spirits. His stable was on Tchoupitoulas street, above the Stock Landing.

June 1st.—He was seized with a chill late in the evening, which was soon followed by hot fever, with violent pains in the head, back and limbs; headache, particularly over the eyes.

June 3d.—Fever and pains continued. Took a blue pill, and afterwards a dose of salts; also a dose of oil; these opened his bowels freely.

June 5th.—Came to the Charity Hospital; still had high fever, and headache. The ward student says his eyes were red and his skin slightly yellow. He was ordered a hot mustard foot bath, and cream of tartar drink—these remedies were repeated every day, with now and then an enema of colocynth, until

June 7th.—When I saw him first. He was a patient of Dr. Cross, ward 22. I found him with a yellow skin, particularly about the face and neck; the conjunctiva had been highly injected, and as it was now becoming more pale, gave the eyes a muddy yellow appearance; skin moist, and warm; tongue clean, and moist, but little thirst; pulse 100—some pain in the head, bowels open, stools dark; urine abundant and high colored, &c. Takes the cream of tartar drink.

June 8th.—Rested well, and says he feels like getting well; not yet entirely clear of fever; yellowness giving way to the blush of returning health.

June 9th.—Clear of fever and convalescent.

This case presented most of the features of yellow fever, and no one would have hesitated to call it so, during an epidemic. It had no sort of connection with any preceding case of yellow fever.

The Steamer "*Water Witch*" has arrived from Vera Cruz; but few passengers; no yellow fever on board—reports it pretty bad there, yet in the published lists of deaths at the General Hospital at Vera Cruz for the previous month, I find but three from yellow fever.

MEMORANDUM, *June 9th.*—Weather very hot and cloudy. Went to the Charity Hospital where I found the following interesting case, a full report of which will be here inserted.

Case.—Jacob Seiback, a native of Germany, aged 46 years; a wagon maker by trade; arrived at this city on the 4th June, on a vessel from Havre. He says he kept well on the whole passage, until he reached the Balize. He there took a bath, and immediately afterwards was seized with a chill, which was followed by a hot fever, which has continued ever since. Says he vomited much bile during the first two days, and had severe pains in his head, back and limbs. The mate of the vessel gave him a purgative of some kind, which operated well. He could not sleep, and had great thirst. Entered the hospital, June 8th, ward 13, [Dr. Brickell.] The house surgeon saw him, the evening he entered, and prescribed some of the usual remedies.

June 9th.—Dr. B. saw him first, and happening to visit the hospital that morning, I saw him also, together with a number of physicians, whose attention had been called to the case, under the suspicion that it was yellow fever. Neither the house surgeon, nor the attending student noticed any yellowness of the skin at their visit last evening.

Present state.—Skin perfectly yellow, warm and moist; conjunctivæ injected and yellow; anxious and rather distressed expression of countenance; pulse 100, rather feeble; tongue coated, brownish and dry; anorexia; nausea—vomited some gruel he had taken; very restless; intellect somewhat confused; slight headache; no other pain. Says

he feels very hot—bowels not open for three days—urinates freely. All who saw the case this morning, thought it *yellow fever*, at least they thought there would be no doubt about such a case, if seen during an epidemic.

Treatment.—Pil. hydrarg. grs. x. Take at once; stimulating enema afternoon; ice *ad lib*.

Evening.—By mistake, took dose of oil instead of the enema—has been purged freely; perspires and says he feels better; has been very restless all day.

Treatment.—Emplast. vesicat. to epigastrium; a solution of sodæ bicarb. and morphia every hour till he sleeps; continue ice.

June 10th.—Patient much worse—so ungovernable during the night that he had to be strapped down; took about one grain of morphia, but without producing sleep; blister drew well. This morning is very restless, tossing about the bed, and at times groaning loudly; skin of a deeper yellow, moist and but little warmer than natural; tongue dry; eyes highly injected; countenance indicative of much distress; thirst; occasional spasmodic twitches of the extremities; slight nausea.

Treat.—Stopped the morphia and soda, as it appeared to do rather more harm than good; ordered ice to the head—cold drinks.

Evening.—No better—purplish spots on the mucous membrane of the mouth, with apparent inclination to hemorrhage.

Treat.—Cathartic enema; continue ice.

June 11th.—No better; slept none; bowels open; more restless and feeble. As the case was looked upon as hopeless, Dr. B. resolved to try the effects of camphor and carb. ammonia; he therefore ordered the following:

R.—Pulv. camphor.
Carb. Ammonia, aa ʒi.
Mucilage, ʒiv. M.

Give a table spoonful every two hours, unless the symptoms should be aggravated; continue ice.

June 12th.—Took the medicine regularly through the day yesterday, and appeared somewhat better in the afternoon; but slept none, and this morning is more feeble; still delirious, but is not confined—bit a piece out of the cup, when water was given to him; also bit the spoon—lies now in rather a passive state.

Treat.—R.—Carb. Ammonia,
Pulv. G. Camphor aa 3 ss,
Black Drop 3 j,
Mucilage Acaciæ 3iv. M.

A table spoonfull every two hours; sinapisms to extremities; beef tea. Patient died at 3 P. M.

Autopsy.—*Three hours after death*.—Skin perfectly yellow, with red spots pretty thickly set over the whole body; conjunctivæ yellow; limbs rigid—purplish spots over the mucous membrane of the mouth.

Stomach.—Contained a small quantity of the medicine—mucous membrane slightly engorged.

Duodenum.—perfectly sound.

Liver.—of natural colour—gall bladder filled with dark fluid, more like venous blood than any thing else.

Intestines—healthy—*spleen* normal—*lungs* ditto.

Heart—do.—left ventricle full of dark, thin blood—right ventricle empty—*bladder* entirely empty and contracted.

Head.—Veins of dura mater very much distended—effusion of serum between this and the arachnoid—veins of pia mater turgid, giving a blue appearance to the exterior of the brain, when the dura mater was raised—considerable effusion beneath this membrane, especially at the base of the brain. The ventricles contained no fluid, probably because it had escaped during the removal of the brain.

The substance of the cerebrum and cerebellum appeared perfectly sound.

Now was this a case of yellow fever, or not?

It presented the symptoms witnessed in hundreds of cases of yellow fever, and lacked but the *black vomit* to make the picture complete. It is a fair specimen of the high bilious fever described by James Johnson, as occurring in Bengal and along the African coast. It is like the land fever, that attacks British sailors, if they go ashore and sleep all night on that coast,

MEM. June 10th.—Rained nearly all day. Ship "*Suviah*," with 226, and "*Robert Morris*," with 125 discharged soldiers, arrived this morning. Surgeon Wheaton, U. S. A., came along. He says there was no yellow fever on board. Five men died of chronic diarrhœa on the passage.

MEMORANDUM, June 13.—*Sickness in the Army*—Surgeon Wheaton. This morning I was introduced to Dr. Wheaton, Surgeon U. S. A., who left Vera Cruz on the 1st inst. in charge of ship "*Suviah*" and bark "*Robert Morris*." Dr. Wheaton is from Rhode Island, went out to Mexico with the army of invasion last spring, and witnessed the battles in the valley or basin around the city of Mexico. Dr. Wheaton came down to Jalappa, and established a general hospital there, more than two months ago. He says, the *great disease* of our army, especially the *new regiments*, has been *diarrhœa*. When they remained long in a place, and the sick were crowded, typhus fever appeared. The old regiments of regulars have suffered but little from sickness in Mexico. They take better care of themselves, and are more hardy.

Dr. Wheaton recently came down from Jalappa with some 200 sick and disabled men. He says they did not stay more than an hour in Vera Cruz, came right down to the ships, and embarked. About 125 men were sent over on the *Robert Morris* from the Vera Cruz Hospital. Nearly all of them were cases of chronic diarrhœa. No Surgeon on that vessel. Dr. W. says that four or five men died on the passage, and three or four since entering the Mississippi river. He saw nothing like yellow fever. The Surgeon stationed at Vera Cruz, told Dr. W. there was but little fever there at that time. These vessels, the *Suviah* and *Morris*, are anchored in the river opposite Slaughter House Point, where all the vessels from Vera Cruz are sent. The *American* got here on Sunday night, 11th June. She had carried troops over to Vera Cruz, and hearing of peace, returned without landing them. No sickness on her,

MEM. *June 16.*—Ship “America” and bark “Helen” arrived yesterday from Vera Cruz; left there 7th inst. The America brought 452 sick from general hospital at Jalappa, with Surgeon Craig and Ass’t Surgeon Simpson.

Bark “Helen” brought 65 sick from the general hospital at Vera Cruz, with Dr. McFarland. Both vessels anchored off Slaughter House Point. *No yellow fever.* The sickest patients are sent down to the Barracks, which is devoted to hospital purposes; the other sick are to be sent to the new Marine Hospital on the opposite side of the river from the city.

Two arrivals from Vera Cruz this morning with soldiers under the care of Surgeon Coolidge, who says there was no yellow fever.

MEM. *June 15.*—The “Mary Ann Jones” and “Portland” arrived from Vera Cruz. Also the “Russia.” Dr. Coolidge says there was no yellow fever on board. The Portland brought over about 300 well men of the 13th Regiment. To-day all the sick soldiers are sent to the new Marine Hospital for the first time. Dr. Coolidge informs me this morning, that the sick now arriving have nothing but chronic diarrhoea and the like. He says the soldiers from beyond Vera Cruz pass through the place without any detention. He learns that there is less yellow fever there now, than there was a month ago.

Mem. *June 16th.*—Tremendous rain this morning—city inundated. In regard to the sickness among the returning soldiers, the following communication appeared in the Picayune newspaper of this morning, from Gen. Brooke, in reply to an inquiry from our Mayor:

“*The Return Soldiers.*—The following letter from Gen. Brooke, in reply to one from the mayor of the city, will satisfy our citizens that that distinguished officer has taken every precaution in his power to render the soldiers returning from Mexico as comfortable as may be, whilst they remain here, and also to prevent the introduction of diseases into the corporation. Gen. Brooke, whilst in command of the Western Division of the army, has distinguished himself for promptitude in the discharge of his duties, and humanity in providing for the wants of the sick and wounded:

Head Quarters Western Division, }
New Orleans, June 14, 1848. *}*

SIR:—I have the honor to acknowledge the receipt of your letter of yesterday, and, in compliance with your request, state with pleasure, the arrangements which have been made for the sick and well.

All vessels arriving here from Vera Cruz are anchored off Slaughter House Point. If they contain sick, they are sent off in a steamer to the hospital at the New Orleans Barracks, the Marine Hospital in Algiers, Baton Rouge, and Jefferson Barracks, as may be deemed best by the Surgeon General. It may be well to state that there has not been reported a single case of yellow fever, and that the general condition of the sick is infinitely better than the last year. All the troops for duty will be encamped in the rear of the New Orleans Barracks, on the Bingham and Eclipse Courses, where every provision has been made for their accommodation. It will be impossible for me to state how long

they may remain in this neighborhood, as it will depend on the proclamation of the President of the United States, directing their being mustered out of the service, which, I suppose, will take place at the earliest moment. I shall be happy, at all times, to unite with yourself in taking any steps necessary to the continuance of the health of the city, and the prevention of disease which may occur from the introduction of the sick or well in New Orleans. I beg leave to state further, that in the event of the United States' hospitals not being able to receive all the sick, it is intended to rent Dr. Luzenberg's hospital. I am, with great respect, your most obedient servant,

GEO. M. BROOKE,
Brig. Gen. U. S. A.

To Hon. A. D. CROSSMAN,
Mayor of the City of N. Orleans, La."

MEM.—June 21st.—Weather very hot and wet. The "*Maria Burt*" arrived from Vera Cruz, having more than 400 passengers—no yellow fever amongst them. A norther blowing at Vera Cruz when the *Maria* left. I learn there was not much yellow fever there, when she left; the report from the general hospital shows but nine deaths from the 1st to the 15th June. The N. Orleans Board of Health in their report of deaths for the week ending June 17th, have *one* from yellow fever, but the Secretary, Dr. Hester, accompanies it with the following note at the bottom:—"The certificate of this case was given by a *commissary*, and is not, therefore, entitled to much or any credit." I could get no farther particulars of the case. Surgeon Coolidge is on duty at this place, and kindly furnishes all the necessary information respecting the condition of the troops returning from Mexico.

MEM. June 24th.—A man died with black vomit at the new hospital across the river, under charge of Surgeon Craig, U. S. A. No other case there.

Yesterday I was invited by Dr. Moss to visit a case of yellow fever at Hewlett's Hotel. This was a Mr. R., who had left the city of Mexico about the first day of June; came down to Vera Cruz, where he was detained five days; left V. C. June 14th, on board the British steamer; next day was taken with a chill, followed by high fever, and was treated by a physician on board; arrived at New Orleans on the 20th. Dr. M. was called to see him on the 21st, and found him very ill; "pulse small and frequent; skin cool and of a dusky yellow color, eyes injected, tongue coated, constant thirst, nausea and vomiting acid matters." Dr. M. invited me to see the case on the 23d. I considered it well marked yellow fever and in a critical condition. Hemorrhage now commenced from the gums. To complete the notice of this case, I will here add that the hemorrhage continued six days, but the man finally recovered.

MEM. June 26th.—Dr. F. Downer gave me brief notes of a case strongly resembling yellow fever. A man on Girod street, who had been here since 1st January, was attacked on the 14th June, and died on the 21st. Body turned very yellow; threw up dark green matters just before death.

June 28th.—Board of Health reports two deaths from yellow fever, both occurring at Dr. Luzenburg's hospital.

The Secretary says: "These two cases died at Dr. Luzenberg's hospital, and had just returned from Mexico."

MEM. *June 29th*.—Visited steam ship "*Alabama*" in company of Dr. Hester and Dr. Cantor. She arrived here this morning from Vera Cruz; left there Saturday evening last, 24th. Brought five or six hundred soldiers and officers from the seat of war. I conversed with Surgeon Rutledge, who came passenger. He said the troops came from the interior, and staid but a few hours in Vera Cruz. The troops are generally in good health—saw a few cases of chronic diarrhœa. Dr. Rutledge informed me that there occurred *one plain case of yellow fever* on the passage, in a little boy six years old, the son of the Captain. He had *black vomit* on the 3d day, threw it up in considerable quantities for two days; turned yellow—has not vomited to day, and is getting better. He had been taken off the boat, and I did not see him. Dr. R. said there *was nothing else like yellow fever on board*.

The Georgia Regiment was getting off the boat at the Government wharf, and going direct to Mobile. The Pennsylvanians and New Jersey men were taken up to Carrollton to land.

MEM.—Dr. Hester and I went on board the British ship "*City of Lincoln*," lying near the Government wharf, from which a case of yellow fever had been sent to the Charity Hospital this morning (29th June.) The mate told us the vessel had been in port ever since the 5th inst. last from Liverpool. Within a week or so past there have been about six cases of fever—four of them were not severe, and soon recovered. One man died last night, without, (as I was afterwards told by Dr. Jos. E. Ker,) black vomit, but turned almost black after death, according to the mate. Another was taken to the Charity Hospital this morning, and is a plainly marked case of yellow fever.

The crew of this vessel has had nothing to do with the Vera Cruz vessels, though near their landing; and the ship "*America*," which arrived on the 14th, moored next outside of her, and lay a short time. She then anchored off the point.

UNDOUBTED CASE OF YELLOW FEVER AT THE CHARITY HOSPITAL, AFTER
NEARLY A MONTH'S RESIDENCE IN THE CITY.

June, 29th 1848.—Joseph Dilart, native of Antwerp, seaman, aged twenty-three, last from Liverpool, on the British ship "*City of Lincoln*," arrived here on monday, June 5th—vessel lies near the Lower Cotton Press in the 3d Municipality. Seven days since, J. D. says he was taken with a chill, soon followed by hot fever, violent pains in the head, back and limbs. Says he took no medicine, though Dr. J. E. K. visited other sick men on board of same vessel. On Tuesday night (5th day) hemorrhage commenced from the mouth. On the sixth day, (Wednesday) he says he had a violent purging for a short time. On this (Thursday) morning, he was brought to the Charity Hospital, (pay ward 12) Dr. R. I happened to call there soon afterwards, and found him in the following condition: Skin and eyes slightly yellow; skin of natural temperature and dry; pulse about eighty, full and soft—urine scant, and he says high colored;

thirst; pretty free hemorrhage from the gums; no nausea—considerable tenderness over the abdomen; somewhat restless. Dr. W. and Dr. C. and others, who saw the case, had no doubt as to its being yellow fever. Dr. R., the attending physician, had some doubts.

Treatment.—Full warm bath—lemonade iced. R.—Aqua. menth. pip. $\frac{3}{4}$ iii, strychnine gr. 1-4, simp. syrup $\frac{3}{4}$ i. M. Give a table spoonful every two hours.

June 30th.—Found patient much worse—lies with his eyes closed, does not speak; tosses himself occasionally. Nurse says he was very restless throughout the night; up very often with purging of blood; no vomiting—took all the medicine. This morning his skin is more yellow, rather livid about the face and neck; eyes more yellow, but not injected—pulse 120, small and weak—passed urine this morning; blood coagulated about the mouth.

Treat.—Continue the strychnine as yesterday, adding syrup tolu. Rub body with dry mustard—sinapisms to extremities. Died at $5\frac{1}{2}$ P. M.

Autopsy.—July 1st $9\frac{1}{2}$ A. M. Body not much emaciated—not very rigid—skin not very yellow, rather livid about neck and face. Face swollen; blood oozing freely from mouth and nostrils.

Chest.—Lungs dark and engorged with blood; pleuritic adhesion on right side,

Heart.—Flabby and empty—no coagula—lining memb. dark red.

Abdomen.—Peritoneal sac contained bloody serum. Gas under peritoneal memb. in the iliac fossae.

Liver.—Very flabby—surface of right lobe of mottled brown color; under-surface green; left lobe natural color. Substance of liver very dry, and crepitant, like lung—no bile in the *pori biliaires*.

Spleen.—Somewhat enlarged, and crepitant on pressure.

Stomach.—Dark externally—contained fœtid gas, and a little dark bloody mucus; in fact *black vomit*; mucous membrane in large curvature elevated with gas—emphysematous, livid; little blood in duodenum; muddy fluid in other intestines. No organic lesion.

Spinal Marrow.—Between shoulders, blood effused and coagulated; marrow pale. I did not see the brain.

MEM.—Another case of yellow fever at Charity Hospital, June 29th.

On the same morning, Dr. Cross and myself went out to the dead house, and witnessed an autopsy of the following case:

Case.—R. Remis, Spaniard, aged 34; ship carpenter, from Barcelona; in city two months; brought to hospital by his friends, who said he had had fever six days. Entered June 28th, then very yellow, and had slight hemorrhage from mouth. Considered *in articulo mortis*. Died at $2\frac{1}{2}$ P. M.

Autopsy, June 29th—Body generally yellow; dark green about the neck; fœtid blood oozing from the nose.

Stomach.—Contained redish fluid; mucous membrane livid.

Liver.—Entire surface of mustard color; underneath, of bronze color—gall bladder full; stain of bile on surrounding parts; bladder full of red urine. No further examination.

MEM. *July 1st.*—Dr. H. informed me that a man died last night on Dryade street, above Triton Walk, he thinks with yellow fever. He was a drayman, working all about the city. He died on the 8th day of sickness. Dr. H. only saw him the day previous to death, and the morning after death. The body was of a livid yellow; blood oozed from the mouth. No autopsy made.

July 2d.—Weather hot—frequent rains. Went up to Carrollton, and visited the soldiers encamped on the race track there. The *stage*, or *stand*, an elevated, open shed, erected for the comfort of visitors to the races, is now converted into a temporary hospital. I saw a number of invalids at this place, chiefly chronic bowel complaints—nothing like yellow fever. The track is covered with tents, exposed to the sun. From the late rains, the ground is very wet all around. There are between one and two thousand men encamped at this place. They have recently returned from Mexico, and have to be detained until they can be paid off and discharged. The most of them are kept here one or two weeks.

CASE OF BLACK VOMIT ORIGINATING IN THIS CITY.

July 6th.—John Kyle, native of Pennsylvania, came last from Kentucky, three months ago. An athletic man, aged 31. Has been at work in a sugar refinery, near the saw-mill on the river, at the lowest part of the Third Municipality. Says he was in the habit of coming up into the city occasionally. Not in the habit of visiting ships, or having any thing to do with them. Says he was attacked with chill on the third or fourth of July, soon followed by high fever, pains in the head, back and limbs.

Entered Charity Hospital July 6th, ward 13; Dr. Brickell. Visited by me during the absence of Dr. B. Saw him first on the 7th September. Considerable fever—pulse upwards of 100, full and strong—severe pain in head, back and limbs—nausea and vomiting—eyes injected—skin hot, and beginning to turn yellow—thirst, &c.

Treatment.—Cups to mastoids and epigast.—purg. enema—poultice to epigast.—hot must. foot bath—lemonade.

July 8th and 9th.—Patient continued very ill. The house surgeon saw him, and said he thought it yellow fever. He was cupped again—had repeated foot baths, stimulating frictions, poultices, laxatives, ice, &c. Was very restless, constantly getting out of bed. Slight delirium at night—continued irritability of stomach—vomited no bile—disposition to hiccup.

July 10th.—Found patient extremely ill; quite yellow; skin moist, and of natural temperature; bowels open; urine scant; no pain—vomiting redish sanguinolent fluid, in small quantities; still restless. Ordered solution bicarb sod. and morphia—sinapised poultice to epigast., stimulating frictions to surface, lumps of ice, &c.

Evening.—Patient almost hopeless—constantly vomiting redish fluid—hiccup—no urine—desires to get out of bed, &c.

July 11th.—Died this morning about 5 o'clock.

Autopsy.—Five hours after death. Present, Drs. Wederstrandt, Axson, Wynn, Tucker, Nott, and Moss.

External Appearance.—Body very yellow, and not emaciated.

Chest.—Lungs loaded with blood—extensive pleuritic adhesions.

Abdomen.—Stomach contained 10 or 12 oz. dark red fluid, with a thick black sediment; mucous membrane of a dark red color, and highly engorged.

Intestines.—Of a dark, livid color in some places—contained a thick, redish fluid; mucous membrane highly engorged.

Liver.—Of pale yellow color, externally—large and highly engorged with blood, which flowed out freely when cut. No bile visible in the small ducts.

Gall Bladder.—Small, and contained less than an ounce of thick, redish bile; lining membrane highly engorged, and of a dark red color. Well marked *echymosis* around the gall bladder.

Spleen.—Remarkably small and firm.

Urinary Bladder.—Contracted and nearly empty.

Kidneys.—Normal.

Brain.—Not examined.

Remarks.—No person who saw this case, had any doubt about its being yellow fever.

The first case of black vomit last year, occurred and died on the 7th July.

July 7th.—Saw a case of fever at Charity Hospital—became quite yellow on the seventh day; been in the city since last fall.

Conversed with Dr. Halsey, Surgeon U. S. A., who arrived to-day on the "*Palmetto*." He said a man died of yellow fever on the passage; (Lieut. Barry, of Kentucky;) a cabin passenger, in the midst of about fifty others. There were about 400 soldiers on this vessel. Dr. Halsey says he heard of but little yellow fever in Vera Cruz.

July 9th.—Dr. McCormick has a case of yellow fever at the St. Charles Exchange, in Major Smith, of the Commissary Department. Major S. came over on the steamer "*Palmetto*," which left Vera Cruz on the 3d July, with 400 men of the 15th infantry, besides 45 cabin passengers, and arrived here on Saturday evening, July 1st. Maj. S. was sick on the way; 6th July, Dr. McC. says he was a *plain case*. Died on Tuesday morning, July the 9th. Dr. Halsey attended this case with Dr. McC., and told me he threw up a little *black vomit*.

July 10th.—At Stone's Hospital to-day, I saw six Mexicans belonging to Col. Dominguez's Spy Company. Four of them had yellow fever. Two of them in a hopeless condition; one dying with black vomit and hemorrhage from mouth. These men came over on the steamer *McKim*, and arrived yesterday morning. Some half-dozen others died on the passage, with *vomito*. I learn that Col. Dominguez and his men stayed about 20 days in Vera Cruz. They were all from the interior of the country, and never had yellow fever previously. There were no cases of yellow fever amongst our troops, on the passage.

July 11th.—Visited Stone's Hospital. Two of the Mexicans above mentioned, were dead this morning; another in a hopeless condition; another looks like recovering.

CASE OF YELLOW FEVER AT CHARITY HOSPITAL.

MEM. *July 13th.*—A man died at the Charity Hospital this morning, with black vomit—an unquestionable case of yellow fever, originating in this city. The following is taken from the books.

Andrew Johnston, a native of Denmark, aged 22 years, steam boat hand—resided in New Orleans for two months past—was admitted into the Charity Hospital, July 10th, extremely sick; said he had been sick eight days. He was in ward 18, (Dr. Wederstrandt.) Dr. W. showed him to me on the morning of the 11th. As he could not speak English, I did not ascertain in what part of the city he lived. His condition was almost hopeless—he got worse till the 13th, when he threw up *black vomit*, and died soon afterwards. He was very yellow—no autopsy was made, as there was no mistaking the case.

July 16.—I went with Dr. B. H. Moss, down to the U. S. Barracks—saw Drs. Craig, Hitchcock and Sloan. Learned there were about 350 sick in hospital; most of them with *chronic diarrhæa*—no yellow fever amongst them. There has as yet been no death from yellow fever at this place, notwithstanding the many sick that have recently arrived from Vera Cruz. They are building an extensive new hospital at the Barracks, capable of containing at least 600 invalids. We visited the sick, and found every thing very neat and comfortable.

A great many troops are now arriving from Vera Cruz, and some from Tampico—yet they bring but very few cases of yellow fever.

A VERA CRUZ CASE.

July 17th.—*Black Vomit at Charity Hospital.*—Michael McGarvey, Irishman, aged 33, come from Vera Cruz, Sunday morning, July, 16th—entered Hospital, ward, 20, same day—then sick six days—threw up black vomit at night—became *very yellow*—died next day at 4, P. M.

CASE ORIGINATING HERE.

On the same day as above, and same ward, C. W. Crittenden, aged 24—native of New Hampshire, a pilot on one of the tow boats plying between New Orleans and the Balize—came here in January last—had never spent a summer in the South—was taken sick at the Balize, on the 14th July, with headache, pains in back and limbs, accompanied by high fever—came up to the city on the 15th, and went to a boarding house near the lower market—took no medicine. Entered Hospital, July, 16th—then had high fever. Dr. W., the house surgeon, ordered v. s., mustard pedeluv, cathartic enema, and quinine in small doses—felt faint after the loss of little blood—had hemorrhage from the nose—hemorrhage again the next day.

July 21st.—Found him cool and clear of fever—rested pretty well last night—pulse 72; bowels open—urine free—gentle perspiration—hemorrhage from nose again this morning.

July 23d.—Cured. This would not be called an unquestionable case of yellow fever, though I have no doubt, it would have been plain enough if it had terminated fatally.

MEM. *July 18th.*—Found seven other cases of yellow fever at the Charity Hospital, four of which originated about New Orleans, and three came from Vera Cruz.

Original case 1.—John Gordon, native of New York—seaman, aged 21—came to New Orleans, *July 3d*, on the Ship “Oregon,” which anchored off Slaughter House Point. Gordon remained on board all the time. He was attacked with fever, *July 11th*; took a dose of castor oil. Entered Hospital, ward 22, (Dr. Cross,) *July 13th*. He was bled, cupped, and took gentle purgatives, &c.

July 17th.—Commenced throwing up genuine *black vomit*; continued to throw black vomit till 4, p. m., *July 20th*, when he died. No autopsy—*undoubted case*.

Original case 2.—(Ward 14) Irish drayman, now convalescent—quite yellow. Had been about New Orleans the last three years, but never spent a summer here, nor had yellow fever.

Original case 3.—(Ward 15) J. H. Punkhaus, a Prussian, been here five years—lives in Third Municipality; has had intermittent fever, but never had yellow fever—now quite yellow. This man afterwards became delirious, and had to be tied down; had hiccup—did not throw up black vomit—died, *July 22d*.

Original case 4.—(Ward 18) Tow-boat hand; been here four years; never had yellow fever. *July 25th.*—*Not a plain case*—recovered.

Vera Cruz cases.—one very ill—two recovering.

MEM. *July 22d.*—I find in the *Picayune* newspaper of this morning, the following article which shows the number of troops which have recently come from Vera Cruz to New Orleans:

“*Transportation of Troops from Vera Cruz.* We are indebted to the courtesy of Captain Maston, Acting Quartermaster at Vera Cruz, for furnishing us, through a correspondent, with the following statement:

“*Statement of the embarkation of U. S. Troops, Quartermasters’ men, &c., from the port of Vera Cruz to the United States, from the 3d to the 14th of July, 1848, inclusive:*

July 3.—Per ship Lapland, for New Orleans, 12th and 15th Infantry, . . .	400
“ 5.—Per steamer Galveston, New Orleans, 70 horses, one company 3d Dragoons,	180
“ 6.—Per ship Niside Stuard, 12th Infantry,	400
“ “ “ “ America, 14th Infantry,	370
“ “ “ “ Tyrone, Rifle Regiment,	400
“ “ “ “ brig Sophia, Rifle Regiment,	100
“ “ “ “ Helen, Rifle Regiment,	150
“ 7.—Per steamer Jas. L. Day, 12th Infantry,	300
“ “ “ “ brig Mount vernon, Rifle Regiment, 60, and 80 discharged men,	140
“ “ “ “ bark Touro, discharged men,	200
“ “ “ “ Lionosa, discharged men,	150
“ “ “ “ ship Robt. Parker, 2d Infantry,	500
“ “ “ “ Suffolk, 7th Infantry,	440
“ 8.—Per ship Masconomo, 3d Infantry,	600
“ “ “ “ Isaac Newton, 1st Infantry,	400
“ “ “ “ brig Milaudon, 7th Infantry,	200
“ “ “ “ schr. Creole, 1st and 7th Infantry,	150

July 11.—Per brig Perfect, 9th Infantry,.....	150
“ “ “ “ Censor, 9th Infantry,.....	100
“ “ “ steamer Mary Kingsland, Taylor's Battery, and one company 9th Infantry,.....	160
“ “ “ steamer Hetzel, Voltigeur Regiment,.....	200
“ “ “ bark Paoli, Voltigeur Regiment,.....	260
“ “ “ steamer Massachusetts, 9th Infantry, 300, and 54 discharged men,.....	354
“ 12.—Per steamer virginia, Voltigeurs,.....	300
“ “ “ bark Mopang, 4th Artillery,.....	160
“ “ “ brig Mary Jones, 4th Artillery.....	140
“ 15.—Per ship Nonantum, 4th Artillery, 280, Pioneers 30, discharged men, 90,.....	400
“ “ “ ship Brunswick, for New York, 2d Artillery,.....	300
“ “ “ “ Rob Roy, for New York, 2d Artillery,.....	250
“ “ “ steamer Portland, French's Battery and 80 horses,.....	80

Total, 7,944

Total number of troops embarked since May 30,.....26,500

MEM. *July 24th.*—Found several cases of yellow fever from Vera Cruz, and two cases of fever from Tampico, *not* well marked.

Ward 22.—Patrick Flanigan, Irish labourer—been in New Orleans seven months. Entered hospital, July 23d; then sick four days.

July 24th.—I found him lying in comatose state; slightly yellow; sordes about the teeth—would not speak—threw up black vomit, and died in the evening.

SEVERE CASE OF BILIOUS FEVER FROM UP THE RIVER.

B. Gillan, aged 21, deck hand on board steam boat “*Alexander*,” which arrived here from Cincinnati on Tuesday, the 18th instant. B. G. says he was taken sick two days before arriving in New Orleans, with pains in legs, back, head, &c., with high fever—took a dose of castor oil, the only medicine he did take before entering the hospital. After reaching New Orleans, he says he went to a boarding house near St. Mary's market—says he omitted a great deal during the first days of his illness, but that he only threw up what he drank; no bile. Entered the Charity Hospital, ward 15, July 23d. I saw him first this morning, July 24th.

Present state.—Very yellow all over; constant nausea; tongue furred and moist; pulse 96, soft and weak; cannot sleep; bowels freely purged yesterday; urine pretty free and very red.

Treatment.—Dr. McGibbon was giving him the ferrocyanate of quinine freely; sinapism to epigastrium, iced lemonade, &c.

July 25th.—I found him very low; mind perfectly clear; said “he was nearly gone;” had slept none; still has nausea; pulse 88, small and feeble; tongue pretty clean, and dry; bowels open, urine free; no pain; lies quiet.

August 1st.—This man got extremely low, but never showed a tendency to hemorrhage. In fact he did not have yellow fever, as was at first suspected. He was only a case of severe bilious fever, such as I have seen in the country, with yellowness of the skin. Dr. McG., at first diagnosed the case yellow fever, but afterwards admitted his mistake. The man recovered from his low state, and this day is completely

convalescent. The yellowness has faded away and disappeared, and he has now nothing but debility to retain him in the hospital.

MEM. *August 1st.*—Up to this date I have endeavored to give some account of all the earliest cases of yellow fever, about which I could learn any thing, and also as many facts as I could ascertain, relative to the number and condition of the troops returning from Mexico. Let us here pause for a moment, and examine the facts presented. Nearly *thirty thousand* men have come over from Vera Cruz to New Orleans, since the 30th of May; and a small number (unknown) from Tampico and the Rio Grande, at which latter place there has been no yellow fever. Amongst all the troops that have come over, we will suppose there have occurred *fifty cases of yellow fever*; though I think this a very liberal allowance. There may have occurred on the passage, and at the different hospitals and hotels of this city, as many as twenty deaths from yellow fever amongst these troops; though I have not been able to ascertain more than *ten or twelve*.

On examining the records of the Board of Health, I find there were *twenty-five deaths from yellow fever* in July. Only about *one half* of these occurred at the Charity Hospital, as will appear from the following tables, compiled from the books:

TABLE, showing the Cases of Yellow Fever admitted into the Charity Hospital, up to August 1st, 1848,—the places from which they came last, and the length of time in New Orleans, immediately before admission into the Hospital.

Case 1.	May 28, J. A. D.	Last from Vera Cruz.	In New Orleans, 6 hours.
" 2.	June 8, J. S.	" " Havre.	" " 4 days.
" 3.	" 29, J. D.	" " Liverpool.	" " 4 weeks.
" 4.	July 6, J. D. J.	" " Tampico.	" " 5 days.
" 5.	" " J. K.	" " Kentucky.	" " 7 months.
" 6.	" 10, A. J.	" " Baltimore.	" " 2 months.
" 7.	" 11, G. S.	" " Apalachicola, Fla.	" " 2 days.
" 8.	" 13, J. S.	" " Cincinnati.	" " 2 years.
" 9.	" " W. M.	" " Liverpool.	" " 3 months.
" 10.	" " J. G.	" " New York.	" " 10 days.
" 11.	" 14, B. G.	" " Vera Cruz.	" " 6 days.
" 12.	" 16, C. C.	" " New York.	" " 6 months.
" 13.	" " M. McG.	" " Vera Cruz.	" " 12 hours.
" 14.	" 17, J. P.	" " Galveston.	" " 5 years.
" 15.	" 23, P. F.	" " Ireland.	" " 7 months.
" 16.	" " M. S. M.	" " Vera Cruz.	" " 1 week.
" 17.	" 24, J. S.	" " New York.	" " 1 year.
" 18.	" " B. L. (a Mexican.)	Vera Cruz.	" " 4 days.
" 19.	" 25, P. McA.	" " Liverpool.	" " 5 weeks.
" 20.	" " J. W.	" " Mobile.	" " 2 hours.
" 21.	" " N. S.	" " Liverpool.	" " 2 days.
" 22.	" 26, J. C. (a Spaniard.)	Barcelona.	" " 3 months.
" 23.	" " J. M.	" " Vera Cruz.	" " "
" 24.	" 28, R. S.	" " Vera Cruz.	" " 1 week.
" 25.	" " J. S.	" " Rotterdam.	" " 2 years.
" 26.	" 29, R. S.	" " Vera Cruz.	" " 2 weeks.
" 27.	" " J. A.	" " Trieste.	" " 2 months.
" 28.	" " T. G. B.	" " New York.	" " 4 months.
" 29.	" 30, F. M.	" " Louisville.	" " 9 months.
" 30.	" " T. W.	" " New York.	" " 12 months.

Case 31,	July 30,	P. O'B.	Last from	Liverpool.	In New Orleans	8 months.
" 32,	" 31,	J. F. B.	" "	Saint Louis,	" "	8 days.
" 33,	" "	N. B.	" "	Havana,	" "	7 years.
" 34,	" "	S. B.	" "	Genoa,	" "	1 year.

From this table it will be seen, that of the *first thirty-four cases* of yellow fever admitted into the Charity Hospital this year, *only eight* had recently come from Vera Cruz, and one from Tampico.

LIST OF DEATHS FROM YELLOW FEVER AT THE CHARITY HOSPITAL,
UP TO AUGUST 1ST, 1848.

1st death on the	14th June.	Man last from	Havre.	In this city	3 days.
2d " " "	29th " "	" " "	Liverp.	" " "	4 weeks.
3d " " "	11th July.	" " "	Kentucky.	" " "	7 mos.
4th " " "	13th " "	" " "	Baltimore.	" " "	2 mos.
5th " " "	17th " "	" " "	Vera Cruz.	" " "	$\frac{1}{2}$ day.
6th " " "	20th " "	" " "	New York.	" " "	10 days.
7th " " "	22d " "	" " "	Galveston.	" " "	5 years.
8th " " "	24th " "	" " "	Vera Cruz.	" " "	6 days.
9th " " "	24th " "	" " "	Ireland.	" " "	7 mos.
10th " " "	26th " "	" " "	Vera Cruz.	" " "	4 days.
11th " " "	27th " "	" " "	Liverpool.	" " "	5 weeks.
13th " " "	31st " "	" " "	Liverpool.	" " "	8 mos.

It will thus be seen that of the 13 first deaths from yellow fever at the hospital, *ten originated here*, and *three came from Vera Cruz*.

There were three deaths by yellow fever on the 1st day of August; five or six cases in the hospital.

Yellow fever begins to appear in the city in private practice, and may now be considered as having fairly started. The Board of Health reports sixteen deaths from yellow fever, last week.

DEATH OF A CREOLE WITH BLACK VOMIT.

MEM. *August 8th.*—I saw Dr. Picton to day, who told me he had been called last night in consultation with Dr. Davezac to see a daughter of Mr. J. A. Noble, aged six years, and found her throwing up *black vomit*. Dr. D. had been attending her five or six days, for what he supposed was an intermittent fever—he did not suspect yellow fever till last evening. She died in the course of the night. This little girl was a native of New Orleans, but had been absent the last two years, in Ohio.

MEM. *August 9th.*—The Board of Health reported twelve deaths from yellow fever for the last week.

Surgeon P. Craig died yesterday, at the U. S. Barracks, and was buried in the city this morning.

August 10th.—Went up to Charity Hospital to-day. Yellow fever has increased rapidly within a few days past. There are now about twenty cases in the hospital; several with black vomit. I hear of cases in private practice.

Assistant Surgeon Newton, U. S. A., died at the Barracks last night, with *black vomit*. He returned from Mexico about a month since, and was stationed at the N. O. Barracks. He was up in this city during two or three days just before he was taken sick. Dr. McCormic informed

me that he saw Dr. N. on Sunday last, the 6th, and thought then he had yellow fever, but it was not generally believed he had.

August 12.—Counted thirty-six cases yellow fever at the Charity Hospital to-day. It still rains every day; the *unpaved* part of the city is a *quagmire*, and the *paved*, a mud puddle.

After three day's intermission of rain, on the 4th, 5th, and 6th, yellow fever increased rapidly at the Hospital. There is but little at the other hospitals, or in private practice.

August 19.—The Board of Health reports thirty-eight deaths from yellow fever, for the week ending to-day.

August 28.—Yellow fever has greatly increased since last note, but not called *epidemie* yet. The number of deaths last week, at Charity Hospital, to yesterday morning, was 39. The Board of Health reports 97 deaths of yellow fever for the week ending 27th. Still not much in private practice. Some physicians have six or eight cases. Weather hot and very wet. The papers mention that one case of yellow fever has occurred at Mobile.

MEM. September 1.—There is much talk about yellow fever. The number of deaths last week was 96. Yesterday the Board of Health held a special session, and declare in the papers this morning that the disease is *not epidemic*. People ask, what number of deaths would constitute an epidemic?

There is also much talk about what constitutes *yellow fever*, as distinguished from *remittent bilious* fever. There is certainly a good deal of fever all over this city and Lafayette. The cases are not strongly marked, in the early stages, but if they get bad, and especially if they *die*, the marks of *yellow fever* become plain enough. The deaths from yellow fever are published every day, in the newspapers.

September 5.—The Board of Health reports 106 deaths from yellow fever, for the last week.

Sept. 13.—The most of the cases of fever I have seen since last mem. have been mild, yielding readily to large doses of quinine, (20 to 30 grs.) There is much talk of the prevailing fever about the city; some calling it *dengue*, others *breakbone fever*. I hear of cases of typhoid fever. The bills of mortality report hardly any other deaths from fever, besides *yellow fever*. On yesterday, (12th,) there were 29 deaths from yellow fever, and but *one* from any other fever. Since last mem. I see there have been six cases of yellow fever at the New York quarantine ground.

I hear of many cases that were sick last year, and have seen some myself.

MEM. September 16.—We had an extraordinary *dry storm* last night; no rain; wind blew terribly; weather cooler to-day; sickness diminishing. The following extract is taken from the *Delta* newspaper of this morning:

"The Health of the City.—Whilst we are not prepared to assent to, or dissent from, the opinion of the Board of Health, relative to the epidemical character of the fever which has prevailed to some extent in our city, because we do not know what they mean by an epidemic—what are the signs and requisites of such a type of disease—yet it must

be confessed that the yellow fever has certainly manifested no little virulence and fatality during the last week. Compared with the terrible epidemic of last year, the number of deaths is small, but then it should be remembered that the fever attained, last year, the very climax of severity and mortality, whilst in previous years it has been declared epidemical, when much less severe than it is at present. Whether contagious, epidemical, or not, it is certainly true that many persons are confined with the fever, and not a few have died of it. Unacclimated persons, therefore, would do well to keep away until the final departure of the disease is announced.

"On referring to our files of last year, we find that for the 24 hours ending on Sept. 14th, the number of interments of persons dying of yellow fever was *thirty-five*. On the same day, and for the same time, this year, the number is *ten*. But then, it must be remembered, that our present population is considerably less than it was at the same period in 1847. About this time last year the fever began to abate, and from the indications, it seems to be declining now. The deaths yesterday were 10; on Thursday there were 14, on Wednesday 29, Tuesday 20; showing a regular decrease, which we hope will continue until the pestilence shall entirely depart from our city.

"The weather yesterday was extremely warm and sultry. We think it must have been the hottest day of the season."

MEM. *Sept. 18.*—The Board of Health reports nine deaths from yellow fever yesterday; also the following resolution in the morning papers:

"At a meeting of the Board of Health, held September 9th, 1848, the following resolution was unanimously adopted:

"*Resolved*, That the Board of Health have to report that the general health of the city, and so far as particularly relates to the prevalence of yellow fever at this time, is not of an alarming character; that the fever still continues to attack, in many instances, unacclimated persons, which attacks, however, are generally light and exceedingly manageable; that since the late meeting of the Board, the reports show no increase in the number of cases, nor in their fatality, but on the contrary, an evident decrease, both in hospital and private practice; and the Board adhere to the opinion published by them last week, that there is nothing indicating a pestilence among us, or the probability of one. Persons, however, who would avoid *entirely* the present acclimating fever, are admonished not to expose themselves carelessly to the causes that excite fevers, and those out of the city in *dread* of the disease, it would be as well to remain yet awhile beyond its influence.

P. W. FARRAR,
President pro tem. Board of Health.

A. HESTER, *Secretary.*"

September 22d.—This is the *equinox*, but we have no storm; sickness decreasing.

October 2d.—The sickness has almost disappeared; but few new cases occurring, and those very mild. The weather has become quite cool and dry. Yesterday, fire and winter clothing were very comfortable. The fever that has prevailed has lately been called *dengue* chiefly; and the most of cases have certainly been very mild and man-

ageable, but whenever death occurred, "*Yellow Jack*" showed his face plainly. The mortuary reports show but few deaths from any other form of fever, besides *yellow fever*.

Sickness has been declining since the 23d September. The Board of Health now cease publishing daily reports. Annexed are extracts from the *Delta* of October 1st, showing the decline of sickness; also that yellow fever is at Vicksburg, and Houston, Texas:

"*Health of the City*.—The weekly reports of the Charity and Marine Hospitals, which we publish to-day, furnish gratifying evidence of the rapidly improving health of the city. Yellow fever, it may now be said, is numbered with the things that were. Henceforth, the daily reports in the Charity Hospital will be discontinued—their further publication is deemed unnecessary. A weekly report, only, will be issued."

Yellow Fever in Vicksburg.—The report of the Sexton of the city of Vicksburg, for the week ending Saturday, the 23d ult., published in the *Sentinel*, shows that eight deaths had occurred in the city, four of which are reported of yellow fever. Since that time, adds the *Sentinel* of the 26th, there have been three other deaths, with similar symptoms. We hope (continues the editor) to be able to announce in our next issue, that the sickness is entirely abated, and the excitement at an end."

"*Yellow Fever at Houston Texas*.—It appears from the Texas papers, that the yellow fever exists in Houston to a considerable extent. The Galveston News of the 21st ult., says:

"The sickness in Houston, (according to information brought by passengers arrived this morning,) has greatly increased within a few days past. We learn, verbally, that the number now supposed to be sick in that city, is about 300; and this statement is confirmed by a letter just received. It is said to be the unanimous opinion of the physicians of that place, that the disease is yellow fever, though in quite a mild type. The cases that prove fatal, are nearly all among unacclimated persons. The usual alarm created by an epidemic is said to have extended far into the interior, and cut off nearly all communication with the country. The consequence is, that the receipts of the present crop in Houston, and, of course, also, in a great measure in this city, will be greatly delayed; and our merchants, as well as planters and others, must experience some disappointment."

MEM. *October 3d*.—Went through the wards of the Charity Hospital to day; found some 20 or 30 lingering cases of yellow fever in the different wards; most of them were very yellow, and partaking more or less of the typhus character. Saw a few recent cases which evidently displayed the same character. We found four corpses from yellow fever in the dead house.

There were 253 deaths from all diseases at the Charity Hospital, in the month of September; of which 216 died of *fevers*, and of these latter, 209 died of *yellow fever*.

The following is from the *Delta*:

"At a meeting of the Board of Health, held October the 2d, 1849, it was unanimously resolved, to publish the following:

"The Board of Health takes great pleasure in announcing to their fellow citizens who are absent, and to persons who contemplate visiting the city

of New Orleans, that from this date no fear of yellow fever need be apprehended, by the unacclimated for this season.

A. D. CROSSMAN,
President of Board of Health.

A. HESTER, Secretary.

October 12th.—I have had three more cases of yellow fever, since the last memorandum. Mr. Knight commenced with *bilious vomiting*, and went down to the verge of black vomit; afterwards turned yellow, and had slight hemorrhage from sores on the nose and lip; he had retention of urine and afterwards hemorrhage from the penis, 7 or 8 days.

The Board of health reports 26 deaths, from yellow fever last week.

MEM. October 27th.—Board of Health reports 16 deaths from yellow fever for last week.

The weather has been very warm since last memorandum. Every body is dressed in summer clothing, and sticking to the shady sides of the streets.

On the 24th and 25th we had considerable rain; otherwise it has been very dry and dusty. Mosquitoes are now as bad as they have been any time this year. There are some severe cases of yellow fever at the Charity Hospital yet. The fatal cases are terminating in black vomit, and hemorrhage from the mouth, and other parts. Dr. Cross had a remarkable case with hemorrhage from the mouth; and Dr. Brickell several with black vomit; one also had hemorrhage from the ears.

I hear of but few cases of yellow fever in private practice at this time.

MEM. November 1st.—Yesterday the weather became very cool; fires quite comfortable. The Board of Health reports 24 deaths from yellow fever for the last week. The late warm weather evidently increased the disease at the hospital. Very little seen in private practice.

There were 90 deaths from *fever* at the Charity Hospital last month, of which 70 were from *yellow fever*, 11 from typhus, 5 from typhoid, 3 from remittent, and 1 from congestive fever.

There were 461 discharges from *fever*; of which 300 were of intermittent, 77 of yellow fever, 74 of bilious remittent, 10 of typhus and typhoid fever.

November 8th.—We have had several very cool days, since the rain on the 27th ult. I saw frost on the morning of the sixth. Mr. Penn, our Postmaster, came over from Mandeville that morning, and told me there was a white frost on the ground across the lake that morning.

Board of Health reports fourteen deaths from yellow fever last week.

November 10th.—Saw a man dead of yellow fever, on the corner of Rampart and Canal streets, a patient of Dr. D. I was told he had thrown up black vomit freely for several days. The man, Mr. Barteau, was a clerk on a steam boat, and had lived in the South some nine or ten years, in and out of New Orleans frequently during the time, but never spent a summer here.

November 13th.—Have just had a plain case of yellow fever in private practice.

November 14th.—Board of Health reports fourteen deaths from yellow fever for last week.

I have had two cases of obstinate continued fever lately; a negro boy aged nine years, and one, age fourteen years. Gave quinine, fifteen to twenty grs. to each, and soon broke the fever.

MEM. *December 4th.*—The report of the Board of Health for the week ending November 18th gives six deaths from yellow fever. That form of fever has now almost vanished, and given place to *intermittent* and *continued fever*. There is but little fever of any kind seen in private practice. The winter diseases, such as catarrhs, bronchitis and the like, begin to appear.

December 11th.—Board of Health reports *one death* from yellow fever for the week ending *December 9th*, about *the last* of the season.

MEM. *December 12th and 13th.*—Two cases of *Asiatic cholera* have been admitted into the Charity Hospital.

Here my *memoranda* concerning the fevers of the year were brought to a close, and my attention directed to the subject of *epidemic cholera*, which now began to prevail in this city. At the request of the editor of this Journal, I drew up a sort of historical sketch of the first epidemic of cholera, but it was not finished in time for insertion into the January number. As it was a subject of general interest at the time, I gave it to one of our newspapers.

It now remains to review the facts that have been presented; to make out some statisticks; to offer a few remarks on the general character of the yellow fever which prevailed; and to say something about the treatment which I adopted.

In regard to the importation of yellow fever from Mexico, it is quite probable, that the facts which I have presented, both in this paper and in my account of the epidemic of 1847, will be viewed in different ways, according as the minds of the readers may be biased by preconceived opinions or foregone conclusions. As before stated, my main object has been to collect, and present as many facts as I could, relative to the subject. If they are not given in too rude a manner to be *intelligible*, people may make of them what they *can*, or what they *please*.

In common with others, I am entitled to an *opinion*, and I shall not withhold it, although it be of no value.

Be it remembered then, that ever since the city of Vera Cruz fell into the hands of our victorious army, (March, 1847,) the intercourse between that place, and New Orleans has been uninterrupted and very great:

Be it remembered that yellow fever prevails in Vera Cruz all the year round, if there be any unacclimated subjects present:

Be it remembered that between the first of May and August, 1848, about 30,000 men, mostly *unacclimated*, came from Vera Cruz to New Orleans; that these men came on ships, and in bodies numbering from 150 to 450; that a few cases of yellow fever occurred on board these ships, and at the hospitals and hotels in New Orleans, without *in a single instance* communicating the disease to those around them. In this observation I have the concurrence of *all the army and hospital surgeons*, with whom I have conversed, as well as the physicians of this city and our *Board of Health*:

Be it remembered that yellow fever began to prevail here this year, in the month July, the usual time of commencement when we have an epidemic, and that of the *first thirty four* cases admitted into the Charity Hospital, up to August the 1st, only *eight* had come from Vera Cruz; and of the *first thirteen deaths* in that hospital, only three patients had come from Vera Cruz:

Be it remembered also, that the circumstances attendant upon the return of our troops from Mexico, afforded the best opportunities imaginable for the dissemination of a contagious or infectious disease. The communication of Surgeon J. B. Porter, U. S. A. to be appended to this, will be found to contain some additional facts relative to this point. Let us now examine the statistics of fever, obtained from the N. Orleans Charity Hospital.

TABLE SHOWING THE NUMBER OF ADMISSIONS FOR THE DIFFERENT FORMS OF FEVER, DURING EACH MONTH OF THE YEAR 1848.

	Jan.	Feb.	Mar	Apr.	May	Jne	July	Aug.	Sep.	Oct.	Nov	Dec.	TOTAL.
Intermittent Fever,..	187	115	101	72	110	160	219	310	299	334	271	233	2411
Remittent	5	8	17	14	25	57	101	87	64	68	39	5	490
Typhus and Typhoid.	520	588	267	169	117	28	23	11	9	56	64	30	1882
Yellow.....					2	2	31	462	597	105	34	1	1234
Catarrhal.....	10			1		2							13
Bilious.....	22	17	11	14	4	13	32	27	19	6	5	3	173
Epheuneal.....	10	5	8	6	4	3	5	14	9	5		4	83
Congestive.....	2		2	2	3	13	8	16	2	1	4	1	54
Scarlet.....				2	1	1	1	2					7
Dengue.....									5	1	1		7
Puerpual.....											1		1
Continued.....	1	1			1	1	1				1		6
	757	734	406	280	267	280	421	929	1004	576	420	277	6361

Total admissions of all diseases, 11,945.

The facts here presented correspond with the statistics of fever which I published in the number of this Journal for July, 1848. It will be seen that *intermittent fever* prevailed throughout the year; gradually increasing and declining with the progress of the seasons, as follows:

In the Spring, there were admitted 283 cases;
 “ “ Summer, “ “ “ 689 “
 “ “ Autumn, “ “ “ 874 “
 “ “ Winter, “ “ “ 535 “

It will also be seen that considerably more than *one third* of all the fevers admitted, were *intermittents*, notwithstanding an extraordinary prevalence of *ship fever*, here called *typhus* and *typhoid*, numbering 1884 admissions, and a mild epidemic of *yellow fever*, numbering 1234 admissions.

From the Annual Report of diseases at the Charity Hospital for 1848, we learn that the number of deaths from *all fevers* was 813; of which 420, *the greater part*, were from *yellow fever*.

From the Annual Report of the Board of Health, published in this Journal, (March 1849), we learn that “the aggregate number of reported interments, in the city of New Orleans, from the 18th December, 1847,

to the 1st January, 1849, was 7,719." In the following number, (for May) an error occurs in the remarks of the editor, where he states the total mortality for the year, to be 9,352. (See page 797.) On inquiry, I found this error to arise from extending the bill of mortality into more than three months of the present year. The previous report of the Board is correct, with the exception of twelve days taken from the year 1847. It appears that the total number of deaths from *yellow fever* in the city was 872. On examining the records of the Board of Health, I ascertained that the total number of deaths from *all diseases*, during *August and September*, amounted to 1578; and from *all fevers*, 710; of which, 616 were from *yellow fever*. Now, notwithstanding all these recorded facts, the Board of Health never admitted that yellow fever was *epidemic* at any time during this year. As I remarked in my account of the yellow fever of 1847, the term *epidemic* is understood in this city to mean, *a disease that prevails to a great extent and predominates over all similar or kindred diseases at the time*. Now I have just shown from the records of the Board of Health, that the number of deaths from *yellow fever* in *August and September*, amounted to 616; whilst from *all other fevers*, there were only 94 deaths.

So much for the *deaths*; but let us again refer to the Charity Hospital for statistics respecting the number of fever cases *admitted* during the months of August and September. It appears on the books of that institution, that during these months, the number of cases of *yellow fever* admitted, was 1059; the number of cases of *all other fevers* admitted, was 894. What better evidence can we require of a disease predominating over all others of the kind, then prevailing? We confine our observations to this limited period, because no one would contend that yellow fever was *epidemic* before or afterwards.

My remarks relative to the Board of Health are not made in a *censorious spirit*. I am well aware that the members of the Board occupy a disagreeable and unsatisfactory position. They are expected to furnish the community with all the information that may be desired, relative to *public hygiene*, whilst they are not endowed with any *executive powers* whatever. Their transactions are sometimes severely criticised, whilst their admonitions are generally *disregarded*. In short, all that is now effected by our Board of Health is *to let us know from time to time, how many people have died*. In the progress of time, when *thousands more* shall be added to the vast number already destroyed by *avoidable* diseases, it is to be hoped that our city councils will see the necessity of examining into the *causes* of such evils, and authorise their Board of Health, not only *to point out*, but *to have enforced* such measures as are best calculated to preserve the public health.

THE GENERAL CHARACTER OF THE EPIDEMIC.

I fully agree with the editor of this Journal in styling the predominant fever of the summer and autumn, *a mild epidemic of yellow fever*. It was also a *modified* epidemic, i. e., it differed from those which preceded it. But this might be said of each one; for the general character of no two epidemics is precisely the same. However, this presented some extraordinary peculiarities, which I shall proceed to point out. There were many cases in which the fever was accompanied, or followed by

a large number of *boils*, sometimes extending over the entire body and extremities, from the head to the feet. These boils were generally worse on the *back*. One gentleman whom I attended, had probably *fifty* in this region. A number of physicians told me they saw instances of the kind. They generally made their appearance as the fever declined, and were exceedingly troublesome during the convalescence.

The fever of this year was attended with more than the ordinary degree of pain in the back and limbs. This gave rise to the opinion entertained by some physicians, that a form of epidemic fever, called *dengue*, was prevailing together with yellow fever. This opinion was further substantiated by the fact that many *acclimated persons* and *long residents* suffered attacks of the prevailing fever. Another argument advanced by the advocates of *dengue*, was based on the facility with which the fever, with its distressing symptoms, was relieved by mild and simple remedies, if taken in time. Now, for myself, I confess I could see nothing in these facts to invalidate the opinion which I entertained, with many others, that *the prevailing fevers of the season were merely different types of some general disease, arising from the same remote cause*. The remote *febrific cause* produces different effects upon the various individuals exposed to its influence. Creoles or natives, especially those who had passed the age of puberty, would either resist its influence altogether, or if taken sick, would only have a mild form of fever. It would be pretty much the same with persons who had resided here a long time, and had suffered an attack of yellow fever. Negroes, from some peculiarity of constitution, would be for the most part but slightly effected. Ladies who remain within doors, and avoid the most powerful exciting causes, such as exposure to the sun, intemperance, &c., generally have but mild attacks. Whilst persons recently from the north or the interior, who were exposed to the febrific cause for the first time, generally have the most severe attacks. These remarks are applicable to the summer and autumnal fevers of any year, and can be illustrated by the various forms or types of fever to be seen at the same time every year. (See the *statistics of fever* at the N. O. Charity Hospital.) I can readily conceive the *remote cause* of all the endemic fevers of this locality to be *essentially the same*; though it doubtless undergoes changes or modifications according to the progress and peculiarities of the seasons. Nor ought we to expect to see greater uniniformity or similarity in its effects, than we witness in the seasons themselves. No two seasons are *precisely alike*, nor are any two epidemics of fever. The simplest form of endemic fever, (*intermittent*) prevails here throughout the entire year; predominating over all others during the healthier seasons, but gradually running into the more malignant types in the sicklier seasons, and regaining its ascendancy on the approach of frost. In some years, the intermittents predominate throughout; as in 1845, when the whole number of fever cases admitted into the Charity Hospital, was 1763, of which 1403 were intermittent; and during the months of August, September and October, the intermittents numbered 571, whilst all other fevers numbered only 360.

During the summer and autumn of 1848, the usual variety of fevers were to be seen, such as *intermittent*, *remittent*, *yellow*, and *typhoid*, and the customary difficulty existed of diagnosing between cases of severe

remittent and yellow fever. It often could not be done until the latter stages of the disease, whether terminating in recovery or death. The generality of cases yielded readily to treatment, if promptly applied. Several physicians told me they relieved many cases by a dose of castor oil, a mustard foot bath and some warm tea. Yet it is not to be denied, that when similar attacks were *neglected or mal-treated*, they had a *tendency to death*, and the fatal termination seldom failed to display *indubitable marks of yellow fever*. Seeing this to be the case, I always thought it safest to resort at once to what I conceived to be the most efficient treatment. The Annual Report of the Charity Hospital admits but *eight* cases of *dengue*, and no death. Much more was said of it in private practice, though I heard of no death from it. It was not a *killing* complaint, but always called in the aid of "*Yellow Jack*" when an *executioner* was wanted. So far as I have been able to ascertain, the same sort of epidemic fever prevailed at Natchez, Vicksburg, and other places. Many persons were attacked, but *few died*, and these generally with *black vomit or hemorrhage*.

Now if I am not mistaken, the epidemic called *dengue*, which prevailed twenty years ago in the West Indies, Charleston, New Orleans and other places, was a very different thing. That complaint cut some fantastic capers; often the pain (most excruciating) was confined to a finger or toe, an eye or some other spot; and the attendant fever was generally followed by an *eruption* somewhat resembling measles or scarletina. Ours raised a crop of *boils* in many cases, but by no means in all. Now, why the fever of this summer and autumn should have been attended by extraordinary *neuralgia and crops of boils*, it is impossible to say. We need only state the facts, together with our impression, that there was no *separate and distinct disease* yecept *dengue*, which prevailed here at the same time with *yellow, remittent and intermittent fever*.

Treatment.—I come now to a point, which is always looked to with interest by the reader. The medical philosopher may delight to investigate the *causes* of disease and the concatenation of symptoms and lesions from beginning to end; but the mere practitioner and the community at large, look at once to *results*.

If they can find out how to *cure* a fever, they will leave it to the *amateur* to study out the *rationale*. As yet, no special or particular plan of treatment has received the unqualified sanction of the profession. Certain remedies, such as blood-letting, mercurial cathartics, cinchona and its preparations, &c, have commanded extensive approbation; yet, among their advocates there has ever existed much diversity of opinion as to the proper method of applying them, and all of them have met with uncompromising opponents.

In my account of the yellow fever of 1847, I gave a brief outline of the principal general plans of treatment pursued by the physicians of New Orleans. I spoke of these under two heads, viz: the *abortive* and the *eclectic*, and designated the principal remedies relied on in each. From that time I resolved to make a fair trial of the *abortive method by large doses of the sulph. quinine*, as soon as an opportunity should offer. I pursued this method in the fevers of 1848, and I confess that

the results were very satisfactory to me. From the 2nd of August to the 9th of November, I treated seventy-five cases of fever. Most of them were mild, but some very severe. Out of the whole number, but two died; one after discharging me and calling in another physicians, and the other from a *relapse*, in which I did not see him until a short time before death. I prescribed quinine *in all the cases*, and more liberally than I ever did before. I gave it in doses from 10 to 30 grains; generally with laudanum or morphia; sometimes with blue mass. I gave it by the *mouth*, by the *rectum*, and *endermically*. I prescribed it as early in the attack as I could, as boldly as I thought necessary, or rather as I could venture, and during the *exacerbation* of the fever. If given with *sufficient boldness*, the general effect was to subdue the fever within a few hours, and produce ease and rest. I generally ordered a purgative enema and hot mustard foot bath previous to the first dose of quinine, and after this produced a remission of fever, I prescribed a dose of castor oil, or some other mild cathartic. In a few instances, I gave ten or fifteen grains of calomel with pulv. rhei. or ext. colocynth comp. But the best way to show how I gave the sulph. quinine and other medicines, is to report a few cases. I took at the time full notes of *fifteen cases*. To give them all would extend this paper too far. I shall therefore only report a few cases; selecting such as will illustrate the different grades and peculiarities of the prevailing fever.

Case 1.—Mrs. J., a married lady, aged about thirty years, unaccustomed, was attacked with chill and fever on the evening of the 1st of August, and suffered greatly throughout the night. August 2d, I was called to see her very early in the morning. I found her with a burning fever; skin hot and dry; severe pains in the head, back and limbs; intense thirst; tongue slightly coated; very restless. She had taken a dose of castor oil, which had not yet moved the bowels.

Treatment.—Purgative enema; hot mustard foot-bath. As soon as the bowels are opened, take the following:

R.—Sulph. quinine,	℥i.
Tinct. opii.	Gutt. xxv.
Mucilage acaciæ,	ʒi. M.

All at one dose.

Evening.—Feels much better; bathed in perspiration; bowels open; but little pain.

Treatment.—Repeat the dose of quinine and laudanum at night.

August 3d.—Found patient cool and clear of fever; free perspiration; no pain; slept well.

Treatment.—Sulph. quinine grs. x. at one dose; gruel.

Evening.—Completely relieved. Take 5 grs. quinine,

August 4th.—Convalescent. Discharged.

Case 2.—Mrs. P. aged about 28; rather delicate and nervous; says she had yellow fever in Vicksburg last summer; has never spent a summer in New Orleans. On the night of August 21st, she was attacked with chilliness, soon followed by hot fever and violent pains in the head and back. I was called to her early in the morning, August 22d. I found her with high fever; skin hot and dry; severe pains in the head and back, pulse full and bounding. I advised her to be cupped, but she refused positively.

Treatment.—Hot mustard foot-bath; purg. enema. As soon as the bowels are moved, take the following; R—Sulph. quinine, grs. x. pulv. opii. gr. i. M. All at once.

Evening.—Greatly relieved; has sweated profusely, which she says she never did before; has slept, and now has but little pain; bowels open.

Treatment:

R—Sulph. quinine.

Blue mass, aa grs. x.

Sulph. morphia, gr. 1-4. M.

All at once.

August 23d.—I found her perfectly relieved; had slept well, and sweated profusely; has no fever—no pain.

Treatment.—Purg. enema; chicken broth; lemonade.

August 24.—Has continued to improve. Discharged.

Case 3.—August 25th.—Early this morning I was called to see Mrs. T., a young married lady, supposed to be two or three months advanced in pregnancy. She was attacked last night with rigors, followed by high fever, with violent pains in the head, back and limbs. I found her with severe pain in the head and back; skin hot and dry; face flushed; eyes injected, and suffused; great thirst; nausea; pulse 120, and strong. I advised her to be cupped over the mastoids, but she positively refused. She was willing to be bled from the arm, but I concluded it might be dispensed with.

Treatment.—Hot mustard foot-bath; ol. ricini in small doses, to be aided by cathartic enemata. As soon as the bowels are freely opened, take the following at one dose:

R—Sulph. quinine, ℥i.

Tr. opii. gutt, 25.

Mucilage, ʒi. M.

Evening.—Found her greatly relieved. She had thrown up the oil, but the enemata had moved the bowels freely. She then took the quinine, and soon became quiet. She is now in a profuse perspiration; has but little pain, and has slept; thirst relieved. She vomited about two hours after taking the quinine.

Treatment.—Another enema, and the following dose at night: R—Sulph. quinine, mass hydrarg. aa grs x; sulph. morphia, gr. 1-6. M.

August 26th.—Found patient free from pain, but harrassed with perspiration; every thing about her was saturated. She slept well, and is clear of fever; feels hungry, and has but little thirst. Ordered chicken water, and porteree.

Evening.—Says she is well; has no fever or pain.

August 27th.—Rested well, and is convalescent. This morning, had her customary morning sickness, vomited bile, and was soon relieved.

August 28th.—Not so well. She was imprudently removed to another room and bed last night, and it has caused a relapse. She awoke this morning with headache and nausea; vomited bile, and still feels badly; has some fever. Ordered a foot-bath and some warm tea; cold cloth to head.

Night.—Still unwell; more fever, but sweating; nervous, and cannot sleep; slight nausea. Ordered the following: R—Sodæ bicarb.

℥ii; Sulph. morphiae, gr. i; Aqua flor. aurantii; Aqua distillata, aa ℥ii. M. A table spoonful every hour till she sleeps.

August 29th.—Took three doses of the anodyne last night and rested tolerably well. Still has some fever, and uneasiness of head. Ordered infus. cinchona and serpentaria, a wineglass every two hours. *Evening*: feels better, has sweated and slept through the day. Take nothing.

August 30th.—Rested well and is clear of headache and fever again. Ordered ferro-cynate quinine, grs. vi. blue mass, grs iv. M. ℥ pil. No. 2. One now—the other in three hours.

Evening.—Perfectly well; discharged.

These cases will answer as fair specimens of mild attacks promptly relieved by the liberal use of quinine. I treated many similar cases and with the same happy results. I shall now give some cases of a much more serious character. I fear I shall tire the reader, but I must crave his attention to the following cases. They are taken almost *verbatim* from my note book, and were written at the time of occurrence.

Case 4.—Dr. A. of Lafayette, an athletic man, of sanguine temperament, aged about 38 years; has lived in lower Louisiana for five years past, but never spent a summer in New Orleans, nor had yellow fever. I was invited to see him by Dr. S., his attending physician, about noon, August 20th. I found him in the fifth day of yellow fever. Dr. S. told me he had been well purged, and taken 25 grains of quinine early in the attack, and that by means of hot foot baths, warm drinks and covering, he had been made to sweat tremendously. He is now as red as a boiled lobster; skin fiery hot and sweating; very restless, yet has but little pain; intense thirst; tongue covered with a thick white coat on the centre, the edges red; gums very red; eyes injected; uneasiness of stomach, with frequent eructations; abdomen tympanitic; urine highly colored and rather scant; the prickly heat over the whole body, and very annoying. I told Dr. S. that I thought Dr. A. was in a very critical condition; in short, that he was in great danger of *black vomit*. I advised the bicarb. sodæ with morphia every hour or two, until he slept; an enema of cold water or flax seed tea, and lumps of ice *ad libitum*.

At 9 p. m., I was called in haste to see him. My previous advice had not been followed immediately. I was told that in the evening, Dr. A. had a sort of *collapse*; his extremities became cold and cramped; difficulty of breathing, with a sense of sinking. These distressing symptoms had been relieved by frictions with brandy, the soda and morphia before advised, and ten grains sulph. quinine, insisted on by Dr. A. himself. When I arrived, I found him somewhat relieved, but very apprehensive as to the result of his case. Dr. S. was now attacked with fever, and requested me to take charge of the case, with Dr. T. of Lafayette. I advised the covering to be lightened; a large blister on the stomach, and to continue the bicarb. sodæ and morphia.

August 21st.—Found Dr. A. somewhat relieved, but as I thought, still in danger of *black vomit*. There was no hemorrhage as yet, but the skin and mucous membrane were *so turgid*, that I did not think he could recover without *hemorrhage*. I had often observed that when hemorrhage was threatened, if it commenced from the *nose* or *mouth* before it did from the *stomach*, the patient stood a better chance of reco-

very. from this I inferred, that in such a condition, an *artificial hemorrhage* or *revulsive bleeding*, as the French call it, might produce a happy effect. This patient had too much blood, with a hemorrhagic tendency; but I would not use the lancet, from fear of *sudden prostration*, in his nervous state, and so late in the disease; nor apply cups over the mastoids or epigastrium, from the fear that the scarifications would never cease to bleed, as I have sometimes witnessed. I therefore advised half a dozen leeches to be applied to the *internal malleoli*; cold cloths to the head; continue to eat ice.

Evening.—I took Dr. W. C. Kennedy, one of our most experienced practitioners, up with me to see him. We found him pretty much in *statu quo*; the leeches had *not been applied*, and his skin was still very red and hot. I insisted on the application of the leeches. Drs. K. and T. did not object; but at the same time, they did not anticipate as much benefit from them as I did. Dr. K. recommended the covering to be *very light*, and the body to be sponged with cold vinegar and water every half hour. Both remedies were now used.

August 22d.—We found Dr. A. vastly improved; the leeches had bled *profusely*, and the cold sponging had proved most grateful. He rested well, and is now *cool, quiet and comfortable*. From this time he improved steadily, and on the 25th, we discharged him, completely convalescent.

This is an instructive case in several respects. On reflection, after a more extended experience with the large doses of quinine, given early in the attack, I must think that Dr. A. would never have become so ill, if this medicine had been used more freely in the beginning. He took one good dose of 25 grains, it is true; but he probably required several such doses, in conjunction with opium, and perhaps blood-letting. The following case will show more plainly the *failure* of quinine, and very probably for the same reasons.

Case 5.—*Bridget*, an Irish servant girl aged about 20 years, was unwell for about a week, with headache and slight fever; she took a dose of senna and one of castor oil, and kept about her business until Friday night, August 25th, when she took a footbath, and soon afterwards had a high fever. In the morning of August 26th, I was called to see her first. I found her with considerable fever and headache, but sweating moderately; thirst not distressing; tongue pretty clean; bowels open from a dose of oil this morning.

Treat.—*R.*—sulph. quinine 3ss. pulv. opii gr. i. M. Take all at once; hot mustard foot-bath; cold cloth to head.

August 27th.—Found B. much better this morning, but not clear of fever, as I had expected. She said she was pretty easy all night and sweated freely, but did not sleep well. This morning, she has but little uneasiness in the head; back easy—pulse 88; skin warm and sweating; tongue coated in the centre, edges red; not much thirst.

Treat.—Cold cloths to head; barley water; no medicine.

Evening.—Much the same; skin rather warm, but sweating; pulse 88; no pain. Ordered to be sponged with vinegar and water; no medicine.

August 28th.—Did not sleep well; has less fever, but not clear; skin rather warm, and sweating freely—pulse 84; no pain; has some appetite. *Treat.*—Sponge body; anodyne at night.

August 29th.—Much the same as yesterday; rested only tolerably well—still has some fever, though sweating; tongue moist, edges not so red. *Treat.*—Purg. enema—sponge body again.

Evening.—*In statu quo*; says she feels very weak. I determined to make one more strong effort to extinguish the fever, and ordered the following:

R.—Sulph. quinine, mass. hydrarg. *aa* grs. x.

Sulph. morph.

gr. 1-4. M. ℥ pil.

Take all at once to-night.

August 30th.—Rested pretty well; has no pain, but still has slight fever; skin rather dry, but little thirst. *Treat.*—Purg. enema; continue sponging; thin arrow-root.

Evening.—Still has fever; skin rather dry—had a dark thin stool by the enema. *Treat.*—Repeat enema; spt. mindereri, ℥ss. every two hours.

August 31st.—Did not rest well; still has fever; skin hot and dry; pulse 90; no pain—feels very weak. *Treat.*—Gave the infusion of cinchona and serpentaria, to which was added a small quantity of Rochelle salts, every two hours.

Evening.—Found *myself* discharged. An Irish cousin of Bridget had called to see her for the first time, and finding that she had been sick *five days* and the fever *not yet broken*, she concluded, (properly enough, perhaps,) that it must be *my fault*. She therefore prevailed upon Bridget, against her inclination, to discharge me and call in *her* physician. Of course I withdrew, and left the case in the hands of the other physician; but not without serious apprehensions for the result, as he did not inquire of me what treatment had been pursued. I think my error has been in not pushing the quinine far enough in the beginning of this case. I ought to have given her one or two more large doses, and perhaps, had her cupped; but the fever seemed to be so much *crippled* by the first large dose, that I thought it would soon disappear. In such another case, I should pursue a bolder practice. I still think she ought to get well.

P. S. Thus far had I made my notes, and saw no more of the case. On the 2d of September Mr. L., the gentleman at whose house B. was staying, called on me to say that she was dead; that she vomited before death, but did not throw up *black vomit*. The attending physician had made her sit up in bed the evening before death, not knowing how much debilitated she was. She began to sink soon afterwards, and died in the night.

I introduce this case to show the *failure* of quinine; but I confess the remedy did not have a fair chance. I can but think that I might have saved her life, if I had continued in attendance; but she had no chance with a new physician, who knew nothing of the previous history of the case. In yellow fever, many persons have been lost simply by getting up in bed or out of bed at an improper time.

Case 6.—*Bilious fever from the country; recovery; relapse and death, like yellow fever.*

Sept 1st.—I was called to see Mr. G. of Georgia; a robust man aged about 56 years. He had been trading up on Red River, and arrived in

this city on yesterday, suffering under a severe attack of *bilious fever*. I found him with high fever; severe pains in the head and back, and vomiting great quantities of *yellow bile*. He had been attacked with chill &c., about 24 hours before reaching the city, probably one or two hundred miles distant. He had taken a dose of calomel and rhubarb, and been well purged, though his bowels were now somewhat confined.

Treat.—A sinapism to the epigastrium; a purgative enema; hot mustard foot-bath. As soon as the stomach becomes more quiet, give the following dose. R—sulph. quinine grs. xxv; tr. opii. gutt. xxx; mucilage, ʒi. M.

Sept. 2d—Much better; has rested well; sweated profusely; *fever gone*. Take 20 grs. quinine.

Sept 3d.—Convalescent. I advised him to take a little quinine every morning, and to go on home without delay, as yellow fever was prevailing here, and if he should relapse, he would be apt to have that form of fever. With this, I discharged him, not expecting to see him again.

Sept. 8th.—I was called to see Mr. G. again. Instead of leaving the city, as I had advised, he walked and rode about, attending to business; in the mean time drinking freely of ardent spirits. This improper exertion had brought on a relapse, and he had been sick two days before I was called. I found him with high fever and pains in the head and back; he had distressing nausea and vomiting, but *did not throw up bile*.

Treatment.—Sinapism to epigastrium; hot must. foot-bath; and the following dose. R—sulph. quinine grs. xxv; tr. opii, gutt. xxv; mucilage, acia ʒi. M.

Sept 9th.—Seems better again; fever down, stomach still irritable. Repeat sinapism; give mixture with sodæ bicarb. and sulph. morphia.

Night.—Feels a little better, but still has some irritability of stomach. Continue mixt. sod. and morph.

Sept 10.—Found him with hicough; had not rested well; stomach still irritable; throws up every thing he drinks; some *dark flocculi* seen in the ejecta. He had no nurse, and had neglected my prescription. I urged upon him the importance of having a nurse, and continuing the mixture of sod. and morphia; allowed some iced ale; ordered a mustard poultice to epigast.

Noon.—Found him asleep, and did not disturb him.

Half past four, P. M.—Called, and to my surprise, found him dead. I was informed that after sleeping about two hours, he awoke, threw up some *dark matters*, and *died soon afterwards*. The basin was shown me, and I confess the contents looked very much like *black vomit*, though not strongly marked.

Now here was a plain case of *bilious remittent fever*, fresh from the country, which was promptly relieved, and very probably would not have relapsed, if the man had left the city, as he was advised. When he did relapse, he might have been relieved again, if properly treated and in good time; but by neglecting himself, he was lost. In the *final stage*, the case showed the principal characteristic of *yellow fever*; but no person would have pronounced it such in the earlier stages of the relapse.

Case 6.—Bilious Fever, Yellow Fever, Typhus Fever, Black Vomit, Hemorrhage from the mouth—recovery.

The special attention of the reader is invited to the following case. The report is long, but it is worth perusal.

Philip Ryan, an intelligent Irish lad, aged ten years, had resided in New Orleans about six months; was attacked with a severe chill on Sunday morning, 17th September. He was living at the house of a very respectable gentleman on Bienville street, and the family displayed much interest in the case, as Philip was an uncommonly smart boy. This interest was particularly felt by Mr. H., who lived in the family, and took upon himself the nursing of the case. Mr. H. informed me that after the chill passed off, P. had a raging fever, with violent pain in the head; and that in about two hours, the pain in the head was suddenly arrested by *nausea and vomiting of bile*. His stomach now became the chief suffering organ; the nausea was distressing, and he threw up large quantities of *yellow bile*. I saw him first, late in the evening, and found him laboring under this distress of stomach; a hot and dry skin; intense thirst; bowels constipated. I ordered cold water freely to his head and body; purgative enemas. As soon as the bowels are freely moved, ordered the following: \mathcal{R} —Sulph. quinine, grs. xv; tr. opii. gutt. xv; mucilage, \mathfrak{z} ss. M. At one dose. If the stomach will not retain it, give the same dose by enema.

Sept. 18. Found Philip very ill. The bowels had been but slightly moved, and he had continued to vomit almost incessantly. He looked pale and haggard, although his fever was still high; skin hot and dry; intense thirst; stomach distressed; still vomits bile. He had not taken the quinine and laudanum

Treatment.—Infus. senna, manna and salts, by enema. Give the quinine as soon as the bowels are freely moved; continue cold water to head and chest. With great difficulty his bowels were moved once or twice, and the quinine was given by enema, but was retained only a short time; it was repeated, but without good effect. I ordered the dose to be given by the mouth, but it was rejected immediately. Ordered cups to the epigastrium, but by the time four ounces of blood had been taken, he became deathly pale, and very weak. He spent a wretched day and night.

September 19th.—Nothing had as yet seemed to do him any good; he was still hot, dry, thirsty, and vomiting. I laid him upon the floor and poured cold water freely upon him. This was *delightful*, and quieted him completely. Ordered it to be repeated, if he became hot again. It was repeated four or five times during the day, always with relief, but without producing perspiration. At night I prescribed morphia with cinnamon water, from time to time, to produce sleep.

Sept. 20th.—Found patient extremely ill; complained of great oppression and *burning* at the stomach; refused to eat ice, saying it made him feel chilly and sick. He now threw up *no bile*; tongue dry and slightly furred; rather red. His skin was pale and dry; he seemed very much prostrated.

Treatment.— \mathcal{R} —Calomel, grs. iv; pulv. opii., gr. i. M. Divide into eight powders. Give one every hour. A blister over the stomach. Sulph. quinine, \mathfrak{z} i; tr. opii. gutt. xx. M. By enema. These

medicines seemed to stupify him, without producing any repose. When the blister drew, he was dreadfully tormented. Nothing could relieve him but cloths out of ice water. This quieted him, and he slept. About noon he awoke, and commenced throwing up *black vomit*. This was appalling, but still I did not despair of the case, as I had known several young subjects to recover after the appearance of this usually fatal symptom. Ordered iced porter *ad lib*.

September 21. Had a wretched night; *black vomit* continually.

Treatment.—The lower extremities to be enveloped in blankets, wrung out of hot water and vinegar; the arms to be rubbed frequently with hot vinegar and mustard. Infus. cinchona and serpentaria. with carb. ammoniæ, to be given by enema, every two hours. Port wine and ice, instead of the porter, as he preferred it.

Evening.—Seems very low; extremities cool; pulse very weak; very restless; still vomits black. Continue wine; blisters to the extremities.

September 22.—Got through the night pretty well, but is very low this morning; has some appetite; drinks chicken broth and port wine with avidity. Continue treatment.

Night.—Has had but little *black vomit* to-day. He is now quiet and asleep; skin still dry. but not so hot; has retained several of the last enemas; a great deal of wind discharged from the stomach and bowels; urine free. Complains greatly of his blisters. Continue remedies; also some lime water and orange flower water, when the flatulence is distressing.

September 23.—In *statu quo*. Had an exacerbation of fever in the night, and was rather restless; stomach occasionally oppressed by gas, but no *black vomit* since yesterday noon; has slight hiccough; pulse 120; skin dry; abdomen rather full; does not retain the enemata well; discharges some fæces with them; drinks wine freely.

Treatment.—A large flax seed enema, to empty the bowels; afterwards, enemata of cinchona serpentaria and soup. Continue the port wine.

September 24.—Philip pretty much the same; had an exacerbation of fever again, about 2 o'clock last night. This morning, sleeps continually; occasionally sighs aloud; hiccough continues; does not vomit; passes wind freely from the bowels; no pain; very feeble; urinates freely; sordes on the teeth; tongue dry, and has a dark fur on the back part. Dr. McCormick saw him with me, at 11 o'clock, A. M.—thought him almost hopeless; hiccough pretty bad when we were there. Dr. McC. suggested an enema of quinine and tinc. opii., a few hours before the nightly paroxysm of fever. We ordered 8 grs. carb. amonia to each of the enemata now given.

Night.—Mr. H. came round to tell me Philip had been pretty quiet ever since our last visit; hiccough better; he had begun to sweat for the first time; could not retain the enemata of cinchona, &c.; passed a little dark fæces with every one; still very drowsy; talks in his sleep.

Treatment.—R.—Sulph. quinine, grs. x; tinct. opii. gutt. x; mucilage, $\frac{3}{4}$ i. M. Give by enema. Blister to *nucha*; continue the wine, &c.

September 25.—Rested well most of the night; sweated freely. This morning looks brighter, but is very weak. Continue the wine and soup freely.

Evening.—Found him very restless; constantly tossing about; pulse very feeble; urine not so free as heretofore. *Treatment:*

R.—Aqua ammon. acetat.

Aqua camphoræ, aa ʒi.

Tr. opii, 3 ss. M.

Give half a table spoonful every two hours; iced champagne freely. Repeat the enema of quinine and laudanum at night, if he does not rest.

September 26.—Found Philip sound asleep; had taken the enema of quinine and laud., but could not retain it long; continued restless till late in the night; then slept well.

At 10, A. M. I found him awake, and looking much improved; pulse slower and more full; tongue nearly clean; but little thirst; urine free; no stool; has a good appetite, and is delighted with the *champagne*. Continue the wine and soup. Dress the blisters with quinine ointment.

Evening.—Looks better than he did yesterday, but is becoming restless again; skin warm and too dry. Ordered to resume the camphor mixture of yesterday; to have a flax seed enema.

Night.—Mr. H. came round to inform me he was sweating and sleeping well; the enema had not moved his bowels. Ordered to continue the mixture *pro re nata*.

September 27th.—Has spent a bad night; had a hot fever after midnight, and was very restless. This morning I found him pretty quiet; has slight hemorrhage from the gums; blood coagulated about his lips and teeth; he is hungry, and wants his soup and wine.

Treat.—Ordered his mouth to be washed with brandy and water; take five drops elixir vitriol every two hours.

Evening.—Much improved; sleeps; has a gentle perspiration; pulse down to 100; tongue and teeth clean; no hemorrhage; frequently draws long breath; has something like hiccough occasionally; urine free; no stool.

Treat.—Ordered sulph. quinine grs. x, tr. opii. gutt. xv., to be given by enema at 10, P. M. with the view to prevent the nightly paroxysm of fever.

September 28th.—Much better this morning. After taking the quinine enema, slept well until just before day, when he became restless, and continued so for an hour or two; then became quiet, and was easy when I saw him; sweating freely; skin cool and moist; pulse 84; tongue clean and moist; a little blood about the gums; quite hungry. Continue treatment.

Evening.—Philip appears to be convalescent; pulse 80; skin cool and moist; bowels open; urine free; &c. To take no medicine, unless he becomes restless at night; then the enema of quinine and laudanum.

September 29.—Rested well without taking any thing. Is completely convalescent to day. A thick crop of *sudamina* is to be seen over the abdomen and chest.

October 1st.—He has continued to improve, and now wants to get out of bed.

Remarks on the case.—This extraordinary case, to my mind, plainly illustrates the fact, that the terms *bilious remittent*, *yellow* and *typhus*, applied to the fevers seen in New Orleans, in the months of August and September, more properly designate *certain conditions of the system* produced by a *common cause*, or rather, certain stages of some general disease, than they do the existence of *diseases altogether separate and distinct*; for here we have all these types of fever displayed in a single individual and during the same illness.

In the beginning, this was as plain a case of *bilious fever* as was ever seen in the interior of Alabama or Mississippi; and if it had been cured within the fourth day, it would have been pronounced such by the physicians of New Orleans or Mobile. On the 4th day, he commenced throwing up *black vomit*; and now, no person would hesitate to call it a plain case of *yellow fever*. He had black vomit for three days; then hiccough for two or three days—then fell into a sort of stupid state, extremely prostrate; pulse 130; skin hot and dry; tongue brown and dry, sordes on the teeth, slight delirium, &c. And now, no physician, unacquainted with the previous history of the case, would hesitate to pronounce it *typhus*. Sauvages and Cullen called yellow fever *typhus icterades*; and certainly no physician of experience in New Orleans will deny, that if our yellow fever runs on beyond the 7th day, as it sometimes does, it presents many of the characteristics of *typhus*. This is frequently witnessed among cases that occur late in the autumn. In 1846, many cases terminated in hemorrhage and black vomit from the 11th to the 14th day.

The case is also interesting in respect to the *sulphate of quinine*. In the beginning, I could not bring it to bear *abortively*. His stomach would not retain it; nor could I get enough into him to do any good; but after *the 10th day of illness*, I prescribed it in ten grain doses, by enema, and had the blistered surfaces dressed with an ointment of it, with the happiest effects. I have hardly a doubt that, but for this valuable remedy, my patient would have been lost at last.

I was informed of several recoveries after *black vomit* this year at the Charity Hospital, but I did not have an opportunity to note them. At the risk of exhausting the patience of the reader, I shall report one more remarkable case, showing the effects of large doses of quinine given *early* and *late* in yellow fever.

Case 7.—Mr. A. W., a gentleman aged about 28 years; of nervous, sanguine temperament; has lived in New Orleans several years, but generally went away in the summer. He remained during the summer of 1847, and escaped sickness until late in the season, (October,) when he had a slight attack of fever.

August 29th, 1848.—He was attacked to-day with rigors, soon followed by a raging fever, with severe pains in the head, back, &c. Of his own accord, he took a dose of castor oil, which moved his bowels freely, previous to my first visit at 4 p. m. I found him in bed at his commercial office; his skin was very hot, but moist; face and eyes very red; pain in the head and back; tongue clean; great thirst.

Treat.—Advised him to be removed to his lodging immediately; to have a mustard foot-bath, and to take 30 grs. sulph. quinine at one dose.

Ten o'clock P. M.—Found him sweating most profusely; slight headache; less thirst; disposed to sleep. Take no medicine.

August 30th.—Says he slept about half the night, and sweated profusely; has less fever, but not clear; pulse 100; little thirst; tongue clean; has some uneasiness about the stomach and back. *Treat.*—℞. ferro-cyanat. quinine, blue mass, aa grs. x; sulph. morphia gr. $\frac{1}{2}$. M. Make four pills. Take two immediately, and the others in four hours.

Evening.—Has rested well; no pain; no stool. To have a purgative enema.

August 31st.—Rested well; has slight uneasiness of the head, and stomach; skin warm, red and sweating; pulse 84; more thirst. *Treat.* Emollient poultice to epigastrium; cold cloths to head.

Night.—Pulse 80; sweating freely; skin cooler; head somewhat uneasy. *Treat.*—Purgative enema; afterwards, ferro-cyanat. quinine, and blue mass aa grs. v. sulph. morphia gr. $\frac{1}{2}$ M. At one dose.

September 1st.—Rested pretty well; feels better, but still has some uneasiness of head; some thirst; skin red and moist; pulse 80. Ordered purgative enema.

Night.—Had a slight exacerbation of fever to day; bowels open; pulse now at 80. Takes nothing.

September 2d.—Not so well to day; fever again at noon; more thirst. Ordered cream of tartar drink. Feels better at night.

September 3d.—Rested pretty well last night; feels easy; very weak; pulse 80. *Treat.*—Infus. cinchona and serpentaria with the addition of a little sal. Rochelle; try a little porter and broth.

Evening.—Had considerable fever again to day; headache; thirst &c. *Treat.*—Purg. enema; cold to head.

September 4th.—Burning fever all night; continues this morning; skin hot and very red; great thirst; no pain; urine free; bowels easy. *Treat.*—I determined to try the quinine again, and ordered ferro-cyan. quinine, grs. xii; sulph. morph. gr. 1-4. M.

One o'clock P. M.—I found his fever as high as ever; the medicines had produced no effect whatever. *Treat.*—I now determined to give a strong dose of quinine and opium, and ordered the following:

℞—Sulph. quinine, grs. xxv.
Pulv. opii., grs. ii.
Mucilage, ʒiiss. M.

Take all at once. Apply six leeches to internal ankles; sponge the body with cold water.

Evening, 5½.—Had the pleasure to find my patient cool, quiet and comfortable; pulse again brought down to 80; had slept an hour or two, and sweated freely.

Night.—Much better; skin moist and cool. Ordered to be sponged again if he gets hot; small blisters to the legs.

September 5th.—Rested well; looks pale this morning for the first time; skin cool and moist; pulse 76; no pain whatever; feels very weak. Ordered light nourishment.

Evening.—Is somewhat restless, and cannot sleep. Ordered an anodyne at bed-time.

September 6th.—I was called to see Mr. W. early this morning, and told that he had come near falling over the balcony in the night; he had slept under the anodyne; then started up suddenly, as if in a dream, rushed through an open window upon the balcony, and would have gone over, if he had not been caught. This news caused unpleasant forbodings. When I arrived, I found him pretty quiet, and comfortable; pulse 80; skin warm &c., said he had been dreaming in the night. Ordered a blister to the nucha and some chicken broth. At noon Dr. Farrell met me in consultation. We found the patient low spirited and disposed to weep, in other respects, he was as in the morning. Dr. F. suggested three leeches to each temple.

Evening.—Much the same; the leeches drew but little blood; skin warm, and rather dry; pulse 80, full and soft; has taken chicken water all day. We ordered three more leeches to the temple; to be sponged if he gets too warm; no medicine.

September 7th.—We found patient cool and comfortable; had rested well; pulse under 80; skin moist. Ordered ale and chicken water.

At one o'clock, the nurse having retired to sleep, and left a colored man in charge, Mr. W. took this occasion for another strange freak. He ordered the boy to go to the kitchen and bring him some warm soup, appearing to be perfectly in his senses. Soon after the boy left the room, Mr. W. got up and walked down stairs to the front door, opened it and fell headlong into the street. A man happened to be passing by at the time, and seeing such a looking object, at once imagined that something must be wrong, and rang the bell violently. Mr. W. was soon taken up in an exhausted state, and carried back to bed. Reaction soon took place and he again became comfortable, with the exception of severe bruises upon his thigh and elbow, occasioned by the fall on the pavement.

Evening.—Dr. F. and myself saw him and heard the foregoing narrative. Mr. W. spoke of it and said it was an *unaccountable freak*. He appeared to be perfectly sane, but could not imagine what induced him to go out. At night he complained of his bruises, and was somewhat feverish. Was sponged and took an anodyne.

September 8th.—Rested pretty well; though he had to be sponged several times. Seems much better this morning. Took ale and soup, and at night an anodyne.

September 9th.—Much better; slept well; skin pale and of natural temperature; pulse 72; is hungry. Allowed ale, and part of a squab.

September 13th.—Has continued to improve since last date; has taken an anodyne every night; has a keen appetite, and is now completely convalescent.

September 19th.—Mr. W. has continued to mend, but recovers his strength slowly. *Discharged.*

This interesting case is worthy of special attention. It displays in a striking manner the wonderful powers of quinine; but candor compels me to say, it shows also that I did not avail myself and my patient of the full extent of these powers. One dose of 30 grains, given on the first day, almost extinguished the fever. Very probably another

such a dose on the following morning would have done the work completely; but, as the most of inexperienced persons would have supposed, from the appearance of the patient, I thought it could be dispensed with. The consequence was, that the fever was gradually rekindled, and on the 6th day had become so high, that I had to resort to another bold dose, combined with opium, to arrest it. This did master it, but left the patient in a singular nervous condition. As strange as it may appear to those who never witnessed it, I am convinced that 30 grs. of the sulph. quinine, with 30 drops tr. opii., or two grs. of opium, given *during the exacerbation*, will, in perhaps nine cases of ten, put down a fever like pouring water upon fire. But this is not always *all* that is to be done. A good dose of calomel, (15 to 20 grs.) may now be required to emulge the liver freely, and to act upon the other secreting organs; and then one or two liberal doses more of quinine, to prevent the recurrence of fever.

Experientia docet; and nothing but experience can teach the profession the full powers of quinine. Some of the physicians of New Orleans had learned in 1839 and 1841, that large doses of the sulphate of quinine had the power of putting down the excitement of yellow fever, but I do not think they learned how to follow up the advantage thus obtained. Consequently, although the remedy has ever since retained high favor with some of our prominent American practitioners, they gradually fell back upon more moderate and repeated doses, *say five to ten grains* every two hours, until the system was fully under its peculiar influence. I would not be understood as *condemning* this method; it has the sanction of much talent and experience in this city; but I am strongly inclined to believe that the *abortive method*, by large doses combined with opium, and followed by calomel, if promptly applied, possesses superior advantages. All agree that the *active treatment* of yellow fever should be done as early in the attack as possible; now, if the disease can be cut short within 24 or 36 hours, as I believe it can, why should it be permitted to run on its customary course of from three to five days? But this method requires the sanction of a more extended experience than I have yet had with it. As I remarked in my previous paper, it is practiced by only a few physicians in this city. In the case of Mr. W., I think the peculiar *nervousness* witnessed, may have been caused in some degree by the quinine. In the case of a delicate lady, to whom I gave a dose of 20 grains during the exacerbation, the fever was promptly put down; but on the following day, she had distinct *hysterical symptoms*. However, these soon disappeared, and the fever did not return. Nor will it be denied that some cases of yellow fever, in which *little or no quinine is given*, are attended with extraordinary nervousness, requiring the extensive use of anodynes, stimulants and blisters. As yet, I have seen no bad effects from large doses of quinine, given *early in the attack* of yellow fever: I have thought I did, when given *after the jaundice had appeared*. I can readily imagine that in a severer epidemic than we had in 1848, free blood-letting in some way, might be found to be a valuable adjuvant to quinine, as was observed by the French physician, M. Maillot. This I must reserve for future investigation.

Dr. D. W. Brickell, one of the visiting physicians of the Charity Hospital, pursued the quinine practice boldly in this epidemic. His favorite prescription was quinine, 3 ss, pulv. opii. grs. ii. M. Given at one dose, during the height of fever, and repeat, if necessary.

I will here conclude my remarks, and invite the reader's attention to the more important communications which follow.

LETTERS FROM J. B. PORTER, M. D., SURGEON U. S. A.

NEW ORLEANS BARRACKS, March 9, 1849.

To E. D. Fenner, M. D., New Orleans:

DEAR SIR:—Your communication of the 4th instant came duly to hand, and in accordance with your request, I proceed to reply to the interrogatories in relation to yellow fever.

Interrogatory 1. "How long were you stationed at Vera Cruz?"

Answer. From the surrender of the town, March 29, 1847, to February 8, 1848. During the whole sickly season, I had charge of the General Hospital, the number of patients varying from 300 or 400 to 700 or 800.

Inter. 2. "Did you find yellow fever there at all seasons?"

Ans. Yes, I have seen black vomit in December and January, and in February, a Mexican from Jallapa, died in town of yellow fever. I left a patient, a Mexican woman from Jallapa, very sick with the disease, February 8, 1848; hence I have little doubt that strangers may have yellow fever in all months of the year.

Inter. 3. "What is considered the epidemic, or sickly seasons there?"

Ans. From 1st April to 1st December, or certainly, from 1st May to 1st December. In 1847, there was no yellow fever among the troops before May; but I was informed by residents, that it was surprising the disease did not show itself sooner. It commenced among the French and European Spanish, a short time before the American troops were attacked. In my opinion, the disease was worst in the hot weather of May and June. The rains of July seemed to cool the air, and modify the complaint.

Inter. 4. "What endemic fevers prevail at Vera Cruz?"

Ans. Every kind usually considered of malarious origin. I have seen mild intermittents there, mild and severe remittents, and a high grade of congestive fever. The yellow fever of 1847, was ushered in by a number of cases of congestive fever among the laborers in the Quartermaster's Department, much more terrific in appearance than yellow fever, and quite as formidable in reality.

Inter. 5. "Do the natives ever have the vomito?"

Ans. I cannot say that persons born and raised in Vera Cruz ever have the disease, but Mexicans, from the elevated back country, take it readily; much more so, it appears to me, than Americans. The inhabitants of Jallapa, and other towns on the road to the city of Mexico, have a great horror of *el vomito*.

Inter. 6. "From what you have seen, do you believe yellow fever to be contagious? Please give some of the most prominent facts you have observed bearing upon this point."

Ans. I do not believe in the contagion of yellow fever. I have never seen a single circumstance which would seem to prove contagion, and will proceed to detail a few facts which have occurred in the course of my professional service. No one will, it is presumed, deny that yellow fever is domesticated in Vera Cruz, whatever might have been its origin.

Yellow fever has prevailed epidemically, three times in St. Augustine, Florida, since the change of flags: in 1821, 1839, and 1841. From information derived from the old residents of the town, I am disposed to think that the fever of 1821 had a local origin. But I waive this. It was my fortune to be acquainted with every circumstance connected with the epidemic of 1841, and it is difficult, to say the least, to show any origin to the fever, unless a local one. There was no communication with any other place, for a considerable time; for weeks not a single vessel came into the harbor, and scarcely a stranger came to town by way of the St. John's River and Picolata. Not a single person came from abroad, sick with yellow fever or any suspicious fever, yet in the mean time individuals sickened and died of this disease: first, an industrious shoemaker—a Dutchman; next, a respectable merchant of the place; and both these had resided in town during the whole season. This was about the last part of September, and nearly at the same time a very suspicious case of fever, which I have not a doubt was yellow fever, occurred, but the man recovered. All these cases were in the "infected district," for there was an infected district, a *fons et origo mali*, a focus, from which the disease seemed to radiate to other parts of the town. All the persons first attacked had been permanent residents, through the summer, of this section of the town, where the streets were narrowest, population most dense, and where less attention was given, if possible, to good police than in any other portion of the city. Soon after, the disease became general, and the troops of the garrison, on the outskirts of town, suffered severely.

In the early part of October, Capt. Garner, 3d Artillery, stationed at Picolata, came to St. Augustine on public business, and was detained there several days. A few nights, (two or three,) before leaving town, he attended a Spanish dance, in what I have called the *infected district*, returned to Picolata, had yellow fever, and died. I did not see him, but his physician informed me, that the disease was yellow fever. If I remember rightly, an orderly, who went to St. Augustine with Captain Garner, also had yellow fever at Picolata, and died. It is to be recollected that this part of my communication is made from memory, but there is no uncertainty in relation to any statement, excepting this particular circumstance. No other persons at Picolata had the disease.

About the middle of October, or a little later, the whole garrison of St. Augustine was removed to the southern part of the peninsula, to act against the Seminole Indians, leaving several men behind, in hospital, sick with yellow fever. As only a guard was necessary, a part of company "G," 3d Artillery, Capt. Garner's own company, was sent over to replace the garrison. By this time, yellow fever had become prevalent,

and before the middle of November, when the epidemic ceased, the part of the company in Augustine was almost destroyed, while the portion which remained at Picolata continued healthy.

I do not recollect that any one had the fever in Augustine, who had resided there continuously for a year or two. Recently arrived strangers had it very generally. No officers belonging to the regular garrison, had it; they occupied the upper quarters, the men the lower rooms, on the ground floor; and the latter suffered severely. Some officers at the hotels had yellow fever. The patients were in almost all cases, males; few females had it, and in general lightly. The hospital steward had the disease in his own quarters, and not a member of his family, consisting of his wife, one or two children, and sister-in-law, had it. His place in the hospital, where yellow fever was abundant, was filled by an unacclimated soldier, who did not have fever, although he had a drunken frolic at the close of the epidemic—a dangerous experiment.

The summer was hot; weather dry, and often heavy rains; no attention whatever was given to city police; and the thick orange trees having been killed a year or two before, the yards and fields were covered with rank vegetation—the whole presenting local causes sufficient to account for the origin of the fever. None of the contagionists could ever point out the source of the disease. It may be proper to state that there were cases of common bilious remittent fever at the same time.

Since 1841, much has been done to improve the police, and with good effect; and allow me to remark *en passant*, that thorough policing is in my opinion, of much more importance than all the quarantines ever instituted. In the year above mentioned, all Florida was sickly; yellow fever (I understood) was not uncommon at Tampa Bay, and at Tallahassee the mortality from it was dreadful. If I am not mistaken, it was also in New Orleans and Mobile. I have considered the yellow fever of St. Augustine to depend on the epidemic tendency or constitution of the atmosphere, combined with a favorable endemic condition.

During the past summer, yellow fever prevailed to some extent at Pascagoula, Miss., where the 1st, 2d, 3d, 4th, and 5th Infantry regiments, and seven companies of dragoons were encamped, on arriving from Mexico. I had charge of the General Hospital established there, organized it, and remained with it until broken up.

Case 1.—Soldier, 3d Infantry, Gen. Twigg's Orderly; admitted September 3d; had been sick about 24 hours; recovered. A severe and strongly marked case. Gen. Twigg's quarters were a quarter, or one-third of a mile from the Pascagoula hotel.

2. Soldier of 4th Infantry; admitted from camp, September 10th; sick three or four days (taken about 6th;) died. His regiment was encamped nearly a mile from the hotel.

3. 4. Two men already in hospital, with chronic complaints; September 11th; recovered. Hospital half a mile from the 1st Infantry and nearly two miles from the hotel, all the Infantry being encamped between the hospital and hotel.

5, 6, 7, 8. Between the 11th and 18th September, four men in the hospital taken sick; one steward and three invalids. Three recovered, and one invalid died.

9. A sergeant of the 5th Infantry admitted from his camp, 23d September; died. Camp of 5th Infantry half a mile from the hotel.
10. A soldier of 4th artillery, in hospital; taken 25th September; died.
11. A hospital cook, soldier; taken September 27th; died.
12. A soldier of 1st Infantry; from camp, half a mile from hospital; admitted, Septembr 28; recovered.

Severe cases of fever were common in the country around Pascagoula; several suspicious cases occurred in the village, and some in the hotel. I have already stated that the infantry were encamped between the hospital and the Pascagoula Hotel. The dragoons were encamped two or three miles above the hotel, four or five miles from the hospital, and were more healthy than the foot soldiers---often, (almost always) the case. I saw but little of their sick, they having their own regimental hospital. They had yellow fever, one case at least, as I was informed by Ass't. Surgeon Steiner, U. S. A.

A Creole mulatto, free, residing four or five miles from Pascagoula, and one mile and a half from hospital, who supplied us with milk, sickened and died about the last part of October, the precise date not recollected. I saw him in the last stage; disease indisputable yellow fever. Previous to his sickness, he came daily to the hospital, but did not go into the sick wards. He was much exposed to the sun, and drank spirituous liquors freely. None of his family, consisting of his wife and a number of children, had the disease.

The question naturally arises, how came the first case of yellow fever at Pascagoula? Was the disease contracted at Vera Cruz, remaining latent a period of 50 days? It certainly was not imported from New Orleans or Mobile, for the troops came directly from Vera Cruz. It must then follow, unless the period of incubation might extend to 50 days from the date of embarkation, that the disease was local in its origin.

Inter 7.—"How were the men under your charge at Pascagoula affected by yellow fever?"

Ans.—Much of what might come under this head, has been anticipated in reply to the previous interrogatory. In the robust, the fever was generally developed, with considerable reaction in the first 24 or 36 hours, and running its course as usual, terminating in black vomit and death, or in recovery. Among the invalids, there might be simply yellowness, or black vomit might supervene after slight fever. Yellow fever was not general, however, as only 32 cases among the soldiers and discharged men, were registered. Perhaps several cases of milder character, recorded as remittent, might with propriety have been termed yellow fever. These 32 cases occurred from the 3d September to 19th November, the date of the last case of the disease. There were 13 cases in September, 17 in October, and 2 in November; add the cases of four women, hospital matrons, and there were 36 undoubted cases of yellow fever. The whole number of cases admitted from the establishment of the hospital, July 1st, 1848, to the breaking up, Nov. 23d, is as follows: Yellow fever, 32; all fevers, (including yellow.) 98; dysentery and diarrhœa (mostly chronic,) 449. All other diseases, 210—Total, 757; females not included.

It is highly probable that the number of cases of yellow fever would have been much greater, had not the troops moved off so early in the

season. The 2d Infantry left in the last part of July, the 4th Infantry on the 3d October, the 5th Infantry on the 5th October, and the 1st Infantry, and six companies of the 3d Infantry, on the 16th of October, leaving four companies of the 3d Infantry at the old camp, until the 23d of November. From the 15th October, to 19th November, there were nine cases of yellow fever in these four companies, or over one-fourth of the whole number for the season; add to these, two men taken sick in hospital, and there are 11 cases of this fever from the 15th October, or more than a third of the whole number.

Inter. 8. "Have you found the principal remedies usually resorted to in remittent bilious and intermittent fever, applicable in yellow fever?"

Ans. So much has been written on the nature and treatment of yellow fever, and my remarks have already extended to such length, that I shall be as brief as possible. At present, I regard yellow fever as a high grade of disease, similar to what is commonly termed bilious remittent fever; and the remedies are the same; modified, of course, according to the character of each particular case.

I have thus hastily thrown together some remarks, in reply to your interrogatories, but fear they will not prove of so much value in your investigation of yellow fever, as could be wished.

Very respectfully, sir,

Your most obedient servant,

J. B. PORTER,
Surgeon U. S. A.

GENERAL HOSPITAL, NEW ORLEANS BARRACKS, }
May, 11. 1849. }

To E. D. Fenner, M. D.

DEAR SIR :—

In a conversation a few days since, you made some inquiries in relation to the yellow fever of Vera Cruz, Mexico, and I have accordingly been induced to trouble you with a few remarks concerning that disease in 1847. The city of Vera Cruz surrendered to the American arms on the 29th March, 1847, and measures were immediately taken by the Surgeon General of the army, who was present, to form a general hospital for the sick and wounded of the besieging army, and also for the sick of the troops landing from the U. States; Vera Cruz being the base of Gen. Scott's operations in the field. The undersigned was detailed to take charge of this hospital, which went into operation in the first days of April. The first cases consisted almost entirely of chronic diarrhœa; there being no yellow fever in April and the first part of May.

The months of April, May and June were intensely hot and dry; but yellow fever, nevertheless, did not appear among the troops until the middle of May, and was ushered in by several cases of violent congestive fever among the laborers of the Q. M. Department. The disease continued violent until the last part of June; generally with high reaction, severe pain in the head and eyes, &c.

The treatment cannot be better shown than in the following statement to the Surgeon General, accompanying my report of sick and wounded for the quarter, ending 30th June, of that year.

"In regard to diseases about which volumes might be written, I shall be brief, and only glance at some important points. In the treatment of yellow fever, I regard quinine as the sheet anchor. I am abundantly satisfied with its effects in the yellow fever of Vera Cruz.

"When the yellow fever first broke out in May, it was with violence, and I was in the habit of combining sulph. quinine with calomel, in several of the first doses, at the same time employing leeches, free cupping, in many cases general bleeding, sinapisms, mustard pediluvia, &c. I found that many of my patients were more susceptible to mercurial influence that had been anticipated, and in consequence, some of them had disagreeable ptyalism. All those who had ptyalism, were severely attacked by the disease, and every one of them recovered. This is satisfactory, notwithstanding the disagreeable attending circumstances. However, I never wish to produce salivation in yellow fever

"During a part of May and June, general bleeding was resorted to in almost every case, there being strong arterial action, severe pain of the frontal region and eyes, &c. It answered a most excellent purpose. Then came a dose of calomel and quinine, then a dose ol. ricini; the quinine following regularly at the proper intervals. Such is the brief abstract of my practice in the before mentioned months."

July was not so intensely hot as the previous months. The rainy season had set in, cooling the atmosphere, and evidently modifying the prevailing fever. The general plan of treatment was the same as in the preceding months, with the exception of venesection, which was almost wholly abandoned. As before, cupping, and leeching to the mastoids, nucha, epigastric and lumbar regions, were freely and beneficially employed.

The treatment of yellow fever must commence early in the disease, to be successful. For practical purposes this fever may be divided into two stages; that of reaction, and of prostration, and it is only in the early part (the earlier the better) of the first stage, that the patient has a tolerable chance of being saved.

My general plan of treatment in Vera Cruz was the same in the first stage, with the exception of venesection, as above mentioned, from the beginning to the end of the fever season. The first thing was to place the feet and legs of the patient into a mustard bath, and apply sinapisms to the epigastrium, ligamentum nuchæ, limbs, wrists and ankles. At the same time, unless the stomach were irritable, a dose of 20 or 25 grs. sulph. quin. and 15 or 20 grs. calomel were given. Then cups to the mastoids, cervical lumbar spines, and epigastrium (or leeches to the epigastrium) were applied. In an hour or two, if the stomach were quiet, ʒi or ʒii ol. ricini were given, followed at the proper time, by an enema; if much gastric irritation, the oil was omitted, and repeated enemata administered; all the while 15 or 20 grs. quin., with or without calomel, every 3 or 4 hours; for whatever is done in this disease, must be done quickly. By this treatment, free evacuations were usually procured in a short time, often preventing the occurrence of gastric irritability, or relieving it if already present. This is a brief abstract

of the treatment in the first 24 hours, the time in which the quinine may be expected to prove beneficial. After the second day, little or nothing can be expected from this article ; indeed, but little after the first 24 hours.

In the 2d stage, that of prostration or exhaustion, strong medication was never attempted. Good ale or porter was usually the best stimulant and tonic, but cases would sometimes bear wine in some shape, and a few could even take brandy in preference to any other article. The patient's own feelings were the best guide. Good beef tea or chicken broth, in small quantities, or other mild nourishment was advisable. In this stage of the disease, small doses of mist. carb. ammon. or mist. ammon. et camphoræ, frequently repeated, appeared to be useful, and sometimes tonic doses of the sulph. quin.

I have thus given a hurried abstract of my general treatment of yellow fever at Vera Cruz in 1847.

Your very obedient servant,

J. B. PORTER.

Surgeon, U. S. A.

GENERAL HOSPITAL, NEW ORLEANS BARRACKS, }
May, 15, 1849. }

To E. D. Fenner, M. D., New Orleans :

As a supplement to my note on the subject of yellow fever at Vera Cruz, Mexico, in 1847, I send you the following statistics, which are at your service :

The mortality in the general hospital of that city was as follows :

Quarter ending 30th June.

Mortality per cent.,	-	-	-	-	10.9
" " " from all fevers,	-	-	-	-	10.64
" " " " yellow fever,	-	-	-	-	17.41
" " " " diarrhœa and dysentery,	-	-	-	-	14.38

Quarter ending 30th September.

Mortality per cent.,	-	-	-	-	13.33
" " " from all fevers,	-	-	-	-	14.43
" " " " yellow fever,	-	-	-	-	34.82
" " " " diarrhœa and dysentery,	-	-	-	-	19.40

Half year ending 30th September.

Mortality per cent.,	-	-	-	-	11.90
" " " of fever cases,	-	-	-	-	12.80
" " " of yellow fever,	-	-	-	-	24.64
" " " of diarrhœa and dysentery,	-	-	-	-	15.85

The mortality in this hospital was necessarily great. All sorts of patients had to be received ; those in a desperate and dying condition, as well as those who offered a fair chance for treatment. Troops were continually arriving from the U. S. during the whole summer—inexperienced and unacclimated troops—and were encamped on the beach, near the town, for days, and even weeks ; exposed to all the causes of the prevailing diseases. Considering all the circumstances, it is surprising that the mortality from yellow fever was not much greater. An intelligent physician of the town informed me, that in the Mexican military hospital at Vera Cruz, (within the walls,) a mortality of fifty per cent.

in yellow fever was considered moderate; that 75 and 80 per cent. was not very uncommon; and that even 90 and 95 per cent. mortality had been known in certain seasons, and in particular regiments or corps. The dread of Vera Cruz, in unacclimated regiments, and in all persons, in the season of *vomito*, is well known, and troops have refused obedience, when ordered to the place. To the fear of yellow fever is to be ascribed the fact that no greater exertions were made to relieve the town when besieged by Gen. Scott's Army.

A few notes have been made from the records of this hospital, having reference to the yellow fever of New Orleans in 1847 and 1848.

[1847.]

Third quarter;	Number of cases,	-	-	-	25
	" deaths,	-	-	-	00
Fourth quarter;	" cases,	-	-	-	13
	" deaths,	-	-	-	8
Total;	" cases,	-	-	-	38
	" deaths,	-	-	-	8

Mortality per cent. - - - - - 21,04

Many of these cases supervened on other diseases, the patients having been admitted into the hospital a considerable time previous to being attacked by yellow fevers. The first patient admitted for the disease, was a recruit belonging to the post, August 26th, recovered. He had never been to Mexico. The next case was in a man who had been in Dr. Luzenberg's Hospital, August 27th. The third and fourth cases were recruits of the 13th Infantry, from Mobile, admitted September 8th. They had not been in Mexico.

[1848.]

Third quarter;	Number of cases,	-	-	-	8
	" deaths,	-	-	-	8
Fourth quarter :	" cases,	-	-	-	3
	" deaths.	-	-	-	3

The first case was admitted from on board ship, from a Mexican port, July 9th; died July 10th. The four next cases came to hospital, July 22d, from a ship in the river, from Mexico; the next from ship-board, August 2d. All these were in a desperate, or dying condition, when taken into hospital. The next case was that of Assistant Surgeon Newton, taken sick August 4th; died August 9th. Assistant Surgeon Sloan informs me, that Dr. Newton probably contracted the disease by walking to town in the hot sun, nor was the fever attended to sufficiently early or perseveringly. The last case was that of an hospital attendant, who had a severe frolic in the city; taken sick September 20th; died September 26th. These are all the cases in the quarter. The three cases in the fourth quarter of 1848, were Mexicans, belonging to the spy company from Gen. Scott's line of operations, which was encamped near the Barracks during the season. These men were idle, dissipated, and continually drinking in town, and it is surprising that more of them were not seized with the fever. The three men, the subjects of these cases, were no exception to the above remark. They were taken sick from the 1st to the 3d October; died from 3d to the 6th. Perhaps there were other cases in this and the preceding quarter, which might have been termed yellow fever, but were not registered as

such; this not being uncommon, where the symptoms are light, and the patient laboring under some chronic disease. But I have included every case found on the books.

If yellow fever be contagious, as asserted by some members of the profession, how did it happen that the cases from Mexico, admitted into an hospital filled with patients, nurses, &c., did not spread the disease? It appears to me that a contagious disease ought, in such circumstances, to become general; whereas, there were only eleven cases in the whole year; six of them introducing the contagion; in other words, the origin of the fever. The stewards, nurses, &c., universally escaped. Let us suppose six cases of small pox introduced into an hospital among stewards, nurses, and patients, none of whom had ever had small pox: is it probable that only five additional cases would occur?

Yours, respectfully,

J. B. PORTER,
Surgeon U. S. A.

LETTER FROM WM. M' CRAVEN, M. D.

HOUSTON, (Texas,) Feb. 15th, 1849.

Dr. E. D. Fenner, New Orleans:

DEAR SIR:—The occurrence of cholera, and other engagements, have prevented me from fulfilling the promise I made, to send you a sketch of yellow fever as it prevailed here last fall.

The preceding summer was comparatively healthy. In August a few cases of mild remittent made their appearance; yielding readily to quinine in full doses, in the early stage of attack. On the 30th of August the first case of the epidemic came under my notice. It was under the care of another physician, and then the fifth or sixth day from the commencement of fever. It was a well marked case; hemorrhage ensued the next day; and black vomit and death the day following. He boarded in a house near the steamboat landing, where at the request of the same physician, I saw another case, which proved fatal about the sixth day. He informed me he had prescribed, about the same time, for another of the boarders, attacked in the same manner, but who had gone out of town, and was not then under his charge. He also died. In the course of a few days the landlord died; then his wife, and I think two or three of the children. The rest of the family were removed and the house evacuated. (It was in this same house, by the way, that cholera made its appearance about the 20th of December, and was then occupied by some German emigrants, just arrived from Europe.) During the first week in September, cases appeared in various and distant parts of the town, and without any apparent connection. In a few days more, the epidemic was fully developed, and general throughout the town. It continued till after frost, very few unacclimated persons escaping; and some who had previously had the disease suffered a second attack. Several of these I had attended in 1844. None of them were fatal. Our population had increased to about 5,000; and of this number, I should think, some 1,500 or 2,000 were attacked. The deaths amounted to something over a hundred; perhaps six or seven per cent. of the whole number of cases. The epidemic appeared in every variety of type, from the mildest to the most

malignant. The latter however was comparatively rare, the mild cases greatly predominating. With prompt attention and good nursing, I found the disease extremely manageable. I treated about three hundred cases, in all. To many of these I was called after the period when medicine can be of much avail. Yet only seven deaths occurred under my charge. Two of these were moribund, and died a few hours after I first saw them. One had been treated on the Thompsonian system, and did not remain regularly under my care; a fourth had been in charge of another physician till late in the second day. The other three I treated throughout; being one per cent. which I lost under regular treatment.

Many of the cases were so mild, that, but for the prevailing epidemic, they would not have been classed with it. Most of them, however, being unacclimated persons, and my experience corroborating that of others, that during epidemic yellow fever, but few fevers of any other type make their appearance, I have regarded them all, the mild, the grave, and the malignant, as originating in the same cause, and differing only in degree. I believe an opinion generally obtains, both in and out of the profession, that children, native to the soil, are not subject to yellow fever. Now I have seen much reason to dissent from this conclusion. Last season, during the epidemic, most of the children had fever. This was so common in the families where I visited, though in young subjects the attacks were very mild, that I became satisfied, it was not the impunity of native birth, but one of these light attacks, which secures their after exemption during the prevalence of epidemics.

I cannot bring my mind to the conclusion, that intermittent, remittent, and yellow fever, are identical in origin, and only differ in degree. Intermittents are often as malignant and fatal as yellow fever; so too, remittent. Mild cases of yellow fever are generally, less severe, and more evanescent, than of either of the others. There may be the same affinity between them, that exists between influenza and catarrh, or cholera and diarrhœa. Intermittent or remittent fever, may possibly constitute an element of yellow fever; but in my judgment, something else must be superadded; and then we have a new disease. What that something is; or whether it be simple, or compounded of two or more morbid elements, remains as yet, concealed among the unsolved mysteries of nature; still, I must admit, that in this place, for the last few years, remittents have been gradually approximating the yellow fever type. I saw some cases last fall, which I regarded as yellow fever, distinctly intermittent. One of the tertian type; the first paroxysm lasted twenty four hours, with the usual symptoms of the epidemic; it then terminated in profuse perspiration, which lasted nearly as long, with complete intermission of fever; on the third day it recurred with similar features, and terminated in the same manner, to recur no more.

More cases during this epidemic, assumed the remittent form, than I observed in 1844. This was a common feature in cases which lasted six or eight days—a very unusual occurrence however, in my cases, with the exception of one set, which occurred during the prevalence of a severe norther; nearly every one of which continued six, seven and eight days, with decided remissions toward the last. All recovered but one, who died on the sixth day.

There was in many cases, a complication with, what I supposed to be dengue. But I know very little of that strange disease. At some uncertain period of the fever, or during convalescence, the patient would be attacked with deep seated excruciating pains, very similar to those of rheumatism; sometimes in the fingers, or toes; sometimes in the arms or legs; in several cases they were general, from the hips down, while the other parts of the body were exempt; in several cases the tibia, or radius was the principal part complained of; in one, it was confined to the great toe; and in another, the pains were universal, from the neck to the feet; and so agonising, that the slightest motion was almost intolerable. They were very different from the pains which usually attend the first stage of yellow fever; more violent; more local; but occasionally like rheumatism, migrating from one point to another. Towards the close of the epidemic, I encountered a good many of these cases uncomplicated; most of them in persons, who had, during previous epidemics, had yellow fever, and some, in those convalescent from recent attacks. It then, usually came on with chilliness, attended with thirst, and the pains above described; but little fever followed; surface generally moist; and temperature normal. The pains continued from one to three days, and gradually subsided. The warm bath, quinine, and anodynes, were the only remedies I found available. No case proved fatal so far as I know. Was it dengue? If so, has it not some close affinity with yellow fever. I have seen no well written sketch of its history, and habitudes. But I believe it is confined to yellow fever localities, and prevails at the same season; often, as I have been informed, attacking the unacclimated, when the acclimated are suffering under the latter. Will not some of the intelligent physicians of New Orleans favor us with an article on this curious disease? I, for one, would feel much gratified. Hemorrhage and black vomit; were more frequent than I have heretofore witnessed.

On the subject of contagion, in yellow fever, I have only a few words to add. I am one of those, who do not think a man a fool who believes this doctrine; but I know of no rational grounds to suppose the disease was imported last August. There was a rumor, that two cases had arrived in town and stopped at the house near the landing, before alluded to, previous to the appearance of the epidemic. But these cases appear only to have been recollected long afterwards; and I can obtain no reliable evidence that they ever existed. I have therefore, come to the conclusion, that the disease was of domestic origin. The police of the city had been very much neglected during the summer. The gutters were obstructed, and the water in many places, allowed to stagnate till it disappeared by evaporation.

There was not much rain during the latter part of summer and fall; neither was it remarkably dry. This, I believe, embraces all I have to say concerning the history of the epidemic. I shall, before concluding, add a few words relative to its treatment. I think myself entitled to speak with some confidence on this subject, from the success which attended my mode of practice; and I assure you, I have simply stated facts, without any exaggeration. My principal means of combating this formidable malady, were a small dose or two of castor oil; and from thirty, to fifty grains of quinine; with the addition of hot

mustard baths, mustard cataplasms and poultices, cold affusion of the head, and sponging other parts as indicated, anodynes pro re nata, and brandy or wine in the last stage. The nurse was minutely instructed, and warned of the importance of diligently attending to her duty. If called early, a hot mustard bath was ordered, at least for the feet and legs; a cataplasm to the epigastrium, and red pepper tea, or other hot drinks administered till the chillness had abated. As soon as the stomach was in a condition to bear it, four to six drachms of castor oil were given, on mint water, toddy, or some other agreeable drink, in as small bulk as possible; and it was seldom rejected. The object in view was to rid the stomach and bowels of undigested matters. The nurse was generally instructed not to allow more than three evacuations without administering something to check them. If the oil was tardy in its action, it was aided by enemas. As soon as the bowels were evacuated, and if called late, sooner, from ten to fifteen grains of quinine were given, diffused in coffee, or any other liquid. Coffee is the only thing I have ever tried, that will cover the bitter taste of quinine. This latter was repeated, at intervals of six or eight hours, till thirty or forty grains were taken. When the system was fully under its influence, it was omitted, and not usually recurred to. The after treatment varied according to circumstances; embracing but little medicine. During the early portion of the epidemic, I frequently administered a mild pill, usually containing a little mass hydrarg. But I was much better satisfied with the effects of oil; and discarded the pills entirely. Of those treated in this manner, and they must have numbered near two hundred, I lost but one case. As I wish to curtail this article as much as possible, I shall not trouble you with any further details on my course of treatment. But I wish to subjoin a few remarks on some other therapeutic agents, which have enjoyed an extensive favor with the profession. Venesection I did not think admissible in any case that came under my notice. I heard of only two or three cases where it was practiced; and they were all fatal. Purgatives were used by most of our physicians to a much greater extent than by myself; I think, the result was, that there was greater debility, and more protracted convalescence, in their cases than in mine. But the principal article to which I desire to call your attention, and that of the profession, is mercury. Mercurials have probably been more extensively employed in the treatment of yellow fever, than any other class of remedies. That they have been successfully employed in some epidemics, I cannot doubt. My opinion is, that in cases where the tone of the arterial system is high; and where the fibrine of the blood is in excess, mercury is serviceable. It lessens the quantity of fibrine and aids in reducing the system to the healthy standard. Hence, its acknowledged value in most inflammatory diseases. All our fevers have, for years, been gradually sinking from the inflammatory to the typhoid condition; and especially is this remark applicable to yellow fever. Adynamia is the most prominent, as well as the most dangerous feature, which it presents. The blood is poor in fibrine; the tissues relaxed; and a strong hemorrhagic tendency exists. Is mercury the proper remedy for this condition? If I were a homœopathist, I should answer yes; for it induces that same, or a very similar condition;

consequently it must cure it. But I am not one of that school, who think that the more you weaken an article the stronger you make it; or that quinine will produce intermittent fever, and must therefore cure it. I believe then, that mercury, under such circumstances, increases the mischief, and acts rather as a poison, than a remedy. Because it was safe, perhaps indispensable, twenty years ago, it does not follow that it is so now. The routine practitioner may dissent from this conclusion; but the man of science, reflection, and close observation, will at once admit its truth. Disease is a condition, and not an entity. The same cause operating upon the economy, under different circumstances, will induce different trains of perverted physiological actions, which require different means to combat them. The more I have observed the effects of mercury in yellow fever, the more I am confirmed in my prejudices against its use. In most cases that have come under my notice, where it was freely given, the patient became deeply jaundiced, very feeble, and convalesced slowly, if at all.

A few observations on quinine will conclude my remarks. I believe it is used by all our physicians; but they differ materially in the mode of administration. Some give it freely from beginning to end. Some in small, frequently repeated doses, after the fever has subsided; some combine it with purgatives, capsicum, &c., and give it throughout. I think it only adapted to the early stage, before adynamia predominates. I find the same rule apply in remittents. I seldom derive much benefit from quinine, after the first two or three days; but on the first, or second, they can be cut short without any other medicine. I have never derived benefit from the administration of quinine in great depression and irritability of the nervous system; and especially in the typhoid stage of malignant fevers. In almost any other condition, I believe it may be administered with safety.

WM. McCRAVEN.

LETTER FROM P. B. M'KELVEY, M. D.

ST. FRANCISVILLE, (La.) March 20th, 1849.

To E. D. Fenner, M. D., New Orleans:

DEAR SIR:—I have delayed complying with my promise of writing to you respecting the visits, &c., of the "yellow fever" at this place, from the fact of having mislaid my notes and memoranda, and cannot possibly imagine what I have done with them. I have endeavored to obtain concurrent testimony and recollections, but so far have not succeeded in procuring any of *reliability*. I am fearful that my own reminiscences will scarcely be of any use, as they want data which are essential to render such information available.

I recollect, but one case of yellow fever before the autumn of 1839, which was brought here from the city and died: no other cases occurred. In 1839, the fever prevailed to an alarming extent. How it originated, I cannot say, but the *first* recognised case was a man by the name of "Banta," a resident of the place. This epidemic was confined to *Bayou Sara*. No case occurred *on the hill* or in St. Francisville, (three-fourths of a mile distant from the river bank.) One case, however, died in St. Francisville, having been brought from Bayou Sara.

From that period until 1843, I do not remember having seen or heard of a case. In 1843, the epidemic seemed to be confined to this village (St Francisville.) No case occurred under the hill or at Bayou Sara that I knew of. A remarkable peculiarity attended this epidemic. Although there were many persons residing in the village, but partially acclimated, no individual was attacked or died, but those who were *creoles* of the parish or state, or had resided here for many years. I was not able at that time to trace the origin beyond the precincts of the village. The same year, they had the fever in Woodville, we had four cases here, originating in that place; three recovered; one died; had the black vomit, when he arrived and lived but a few hours. No other cases occurred.

1846.—Recollect one case brought from the city early in the season, that is, he was taken with the fever some week or ten days after his arrival; died. Some five or six weeks subsequent, an epidemic of a *very mild type* broke out simultaneously here and at the Bayou; only two bad cases; one died. *Neither had been in any way exposed to any, beyond local causes.*

1848.—One case originated here. Had not been out of the village or to the city for some months; unacclimated; *died*: no other cases. During the period embraced in the above remarks, the intercourse between this place and the river, and between it and the city, was free and uninterrupted at all times. I regret, as I before observed, that my communication will be likely to prove of so little service to you, as I dare say it is a matter of some importance. But if I ever lay hands on the lost notes, I will be much pleased to give you more ample and precise information.

With sentiments of respect and esteem,

I remain, your obd't and humble serv't.

P. B. McKELVEY.

LETTER FROM WM. A. BOOTH, M. D.

THIBODAUX, (La.), January 9th, 1847.

To E. D. Fenner, M. D., New Orleans:

DEAR SIR:—Several cases resembling yellow fever, originated in our village during the past summer. Not a single one of the persons thus affected had visited Orleans for several weeks previous to the attack.

The only person who contracted the disease in the city, arrived here sick, and died in a few days. Not one of his attendants or visitors had it subsequently.

The cases similar to yellow fever, occurred at various intervals, from the 20th of September to the middle of October, in persons who had little or no communication with each other.

The following is the history of the case I promised to send you:

Mrs. M. aged 40 or 45, had been unwell eight or ten days, but had so far recovered, that upon her servant and child being taken sick, she got up to nurse them. This was on the 10th of October. On the 11th, I called to see the servant and child, and found Mrs. M. in bed, with high fever, headache, &c. As her bowels were somewhat constipated, I prescribed three comp. c. pillul.

October 12th.—The pills have operated tolerably well; her pulse is 130, and deficient in strength; her extremities and skin are warm. She has a troublesome cough; the sputa are very viscid. Her breathing, when asleep or quiet, is natural, but when talking, or in the least excited, it is unusually short, rapid and laborious. A deep inspiration produces but little uneasiness. She thinks she feels some pain between the mammæ. There is great tenderness, and a very disagreeable sense of oppression in the pit of the stomach. She retches, but does not vomit. The retching is supposed to be occasioned by the viscid sputa collecting in the throat.

Treatment.—Cup her freely over the lungs and stomach; repeat this operation at night; afterwards apply a large blister over the stomach, and direct her to take a pill containing one-eighth of a grain of morphia, three grs. calomel, and one of ipecac., every two hours, until she has taken three doses, unless she vomits, and ten grs. quinine every three hours. Took the medicine without vomiting it.

Oct. 13th.—About 4 o'clock in the morning, was called to her. She had *black vomit*. She vomits at intervals of one, two or three hours. The matter vomited is a thick, ropy slime, with which is mixed an abundance of particles resembling snuff, or coffee grounds; and amounts at each time to from one to three or four table spoonfuls. During the intervals, she is quite composed, and suffers very little, being generally asleep. She takes morphia and calomel in pills; morphia in solution, and sometimes toddy, to allay the vomiting; ice cannot be procured.

Oct. 14th.—About 3 o'clock, A. M., twenty-four hours from the time it began, the vomiting ceased. Her mind, which has been perfectly clear, begins now to wander. She knows her friends, but cannot talk connectedly. Her pulse begins to sink, rising occasionally under the influence of brandy by the mouth, and stimulating injections. These conditions of mind and pulse became gradually more perceptible, until 9 o'clock, P. M., at which time she died.

This lady's complexion was very sallow when she was healthy. It became more so during her illness. Eighteen hours after death, the corpse was as yellow as a pumpkin. Her tongue throughout the attack was somewhat more furred, rather darker, and slightly redder than natural. About the time the vomit commenced, she had a dark, bilious consistent evacuation. Since that, she has neither urinated, nor had another evacuation. Being in the habit of attending cases of yellow fever, you will doubtless see nothing unusual in this one. Its origin is the only peculiarity. Mrs. M. had moved to this place only six or eight months previous to her attack; was remarkably domestic and industrious, visited very few persons, and had very few visitors. Neither those she visited, nor those who visited her, had any thing like yellow fever during the season. There was no case in town, at the time, nor has there been one since. She neither saw the gentleman who contracted the fever in the city, nor any of those who had attacks resembling it. Owing to her habits and her health, she had not been off her lot for at least ten days before the beginning of her last sickness. Mrs. M. had four in family, two servants and two children. The youngest child, five or six years old, was taken sick with a mild attack of intermittent fever,

and the negro woman with an obstinate and irregular one of the same disease, a day or so before Mrs. M. The eldest child, (a young girl of 14,) was attacked on the evening of the 11th, with bilious remittent fever of a high grade, and on the morning of the same day, Mrs. M. was seized with yellow fever.

It does appear to me that this *one distinctly isolated* case, proves a great deal. At least, it satisfies me of three things:

1st. That yellow fever is not contagious. Mrs. M. "caught it" from no one, and no one "caught it" from her.

2d. That it is nothing more than a peculiar and aggravated form of bilious remittent fever.

3d. That it *may* originate wherever there is much heat, much moisture, much filth, and a crowd of animals. Mrs. M. lived on a small square, which is crowded with houses, with their backs towards each other. The back yards being occupied by a stable, several privies, and the debris of wood piles. As these yards are held mostly in common, it is every body's business to keep them clean, and, consequently, the filth is permitted to accumulate. They were very filthy when Mrs. M. was attacked.

Having done what you requested, and a little more, I will stop. Some few cases of Asiatic, or epidemic cholera, have been reported as occurring in this vicinity. I shall be pleased to hear from, and want to see you.

Yours very respectfully,

WM. A. BOOTH.

II.—ON THE NATURE AND TREATMENT of the reigning *Epidemic in Attakapas, (March, 1849.)* By J. B. PIGNE, late *House Physician to the Hospitals of Paris, etc., and Lecturer on Pathological Anatomy at the Ecole Pratique.* Translated from the French, by E. S., D. M. P.—, Plaquemine, La.

It were impossible for me, at present, to give a complete history of the disease now existing in the Attakapas, but I trust that the following short description, which a few brief moments of leisure have enabled me to offer to my medical brethren, will be sufficiently clear to enable them to understand my views on the subject.

Copious diarrhœa, abdominal pains, vomiting, cramps, sweating, partial or universal, diminution of heat; such are the phenomena, observed. To determine the nature and seat of the disease it is indispensable to examine carefully each of them.

Diarrhœa.—This is without doubt, the first symptom that occupies the attention of the patient, but if inquired into with care, it will be found that in the majority of cases, the looseness of the bowels has been preceded by constipation, and that in some cases, this constipation was accompanied by pain; some patients ask for advice during this period, so strong, sharp and persisting are these pains. They are gene-

rally seated above the umbilicus, slightly to the left, at least in the majority of cases; sometimes I have found them on the right side. A drastic purgative is generally sufficient to remove them, yet in two cases, I was compelled to administer it twice, the first having been wholly without effect. In some cases, these pains persist with intensity for 24 hours, in others, they precede the diarrhœa, but for a few minutes, whilst in some, they only show themselves with force together with the first evacuation. During this period the pulse is full and regular.

After the abdominal pains, and sometimes accompanying them, diarrhœa supervenes, the nature of which varies according to the actual state of the digestive tube. If it occur in the morning whilst the patient is fasting, the evacuation is generally dark colored, with a slight greenish or yellowish tinge. It is a mixture of fecal matter, of bile, mucous secretions, and serum. If in the day time, after the patient has eaten, in addition to the above, we find undigested food. In the second stool there is a diminution of fecal matter, which gradually disappears in each succeeding passage. In one word, as the stools increase in number, the fecal matter diminishes; the evacuation becomes more watery, more bilious, and after 7 or 8 passages, the bile generally disappears, and the discharges consist merely of mucus, serum and albuminous flakes in more or less abundance. When, at the outbreak of the disease, the intestinal canal contains little or no fecal matter, the first stools are excessively liquid consisting of bile, serum and abundance of albuminous matter. Finally, if the disease is allowed to run its course, or if we fail to arrest it, the exudations from the bowels become more and more watery; the mucous secretions disappear, to be replaced by serous discharges. After the lapse of some time, the evacuations become red without acquiring any consistency, from an admixture of blood with the mucous discharges. The pulse becomes weaker, and towards the end only, becomes intermittent.

Vomiting.—In some cases this symptom shows itself at the commencement of the disease; and this occurs in those cases where the stomach still contains food, and then the matter vomited consists of the food contained in the stomach, with more or less bile. In some cases, however, the stomach is empty, and the patient merely vomits up bile, mixed with mucus and water. This vomiting, which accompanies the outbreak of the disease, is of little importance, and generally ceases spontaneously, whether combatted or not. But, on the other hand, when at a more advanced period of the disease, vomiting supervenes, consisting of bile mixed with abundance of serum, sometimes fecal matter, and sometimes blood, although this symptom does not appear to me to offer, *per se*, extreme danger, yet it shows that the disease is making rapid progress. Many patients die without vomiting, therefore this symptom is not essential. In the majority of cases, it is merely sympathetic; sometimes, however, it depends on the implication of the stomach, in the disease of the intestinal canal.

Cramps.—Cramps are always preceded by lassitude in the extremities. As yet, I have not had an opportunity of witnessing them at the commencement of the disease. It is true that many patients complain, at the outbreak of the disease, of *cramps in the belly and extremities*, but when our inquiries are properly directed, we find that these cramps

consist merely of those abdominal pains I have already mentioned, and flying pains in the limbs. True cramps, that is to say, the pains produced by spasmodic contraction of the muscles, are always secondary phenomena, and never show themselves, except after a certain number of stools, especially of serous stools in large quantities. Generally, these cramps are preceded by vomiting. The inferior extremities, and especially the calves of the legs, are their principal seat; in some cases, however, they are seen in the upper extremities. I am not aware of their having been noticed in the muscles of the trunk, of the neck or face. We occasionally find patients who complain of *cramps in the back*, but these are not true muscular pains; they are seated more deeply, and are merely those *sympathetic dorsal pains* mentioned by Mr. Cruveillier, as existing in a great number of acute diseases of the abdominal and thoracic cavities, especially in pleurisy and pericarditis, with effusion. Rarely patients complain of that peculiar painful band, which was seen in the majority of cases of cholera in 1832 and 1833.

These cramps are not essential to the disease. Many patients die without having suffered from them. They evidently depend on the predominance of the nervous system, produced by the depression of the circulating system. (*Predominence du systême nerveux due à un affaïssement du système circulatoire.*) Cramps are always a bad sign, although they do not denote a certain fatal termination. A considerable number of patients suffered from them, yet recovered; but in these cases, convalescence was tedious. They are rarely permanent, and often offer considerable remissions. I have found that frictions, either dry or moist, with laudanum, camphorated spirits of wine, etc., increased, instead of diminishing their frequency.

Sweats.—This cutaneous exudation does not show itself at the commencement of the disease. They should be divided into two kinds, *hot sweats* and *cold sweats*. The first generally appear, when, by an appropriate treatment, the diarrhœa begins to diminish. They cannot be considered critical, and are generally a favorable sign, unless of too long continuance, for in that case, they weaken the patient, and are followed by excessive prostration, accompanied by vomiting and cramps, to change soon into cold sweats. During the existence of these hot sweats, and even a short time before their appearance, the pulse rises, becomes full and slightly accelerated. They are rarely accompanied by cephalalgia. They last from two to five hours, accompanied by a diminution in the number of stools; many patients have not a single evacuation during their existence, but generally as they decrease, the patients have a stool which is of a better nature than previous to the appearance of the cutaneous exudation.

Cold sweats.—Are generally an unfavorable sign; they usually accompany cramps in the legs and a *diminution in the heat* of the body, at first limited to the feet and hands, but soon rapidly extending over the whole body. We frequently see also at the same time, serous or sanguinolent vomitings, and stools of the same nature. This cold perspiration shows itself in large drops on the surface of the skin, principally on the forehead and face; at first serous, it soon becomes viscous. Sometimes it is unaccompanied by any remarkable wasting and alteration of the face, and then it lasts but for a short time and is of little importance,

it being easy to modify and replace it by a copious warm perspiration. But on the other hand, when together with cold sweats, we find wasting of the face, sinking of the eyes, and depression of the *alæ nasi*, the lips become fuliginous and the disease is most usually mortal, although some patients may yet rally and recover.

During this period of the disease, the abdomen is generally painful on pressure, and slightly distended; the stools become less frequent, vomiting persists; the pulse is small, quick, thready, in a word abdominal, and, what is worthy of remark, the patient merely complains of excessive weakness, and most generally asks for food. The duration of the cold sweats varies from half an hour to three, four or more; they may be considered as the most serious signs of the disease.

Such are the most striking points of this disease. I need not mention others that are wholly exceptional, such as the presence of *ascarides lumbricoides* in the intestinal canal; palpitations; oppressions, etc., which are frequently seen; they are wholly foreign to the disease, and dependant on individuality.

From the preceding remarks, it is easy to perceive that the disease which now occupies us, is a serous enteritis (*enterite serouse*), that, is to say, enteritis characterised by a serous exudation similar to that which we find in pleurisy, pericarditis, etc., with effusion. All the other substances, we find in the evacuations, are merely the contents of the digestive tube which gradually disappear. Ought we to consider the bile, which we find mixed with the evacuations as a morbid secretion? I do not think so. In many cases, the secretion of bile is not increased, but it continues as in the healthy state. It is true that in certain cases, we find the tongue greenish or yellow; but this seems to me to be merely *sympathetic*, and exactly similar to what we meet with in many cases of ordinary enteritis, and especially in the gastric form. But this is not an idiopathic affection of the liver, as we would perhaps be led to believe from the appearance of the tongue, and the nature of the vomiting and stools.

Most frequently, this "serous enteritis" occupies the small intestines; sometimes it extends to the stomach, and in other cases, but more rarely, to the transverse arch of the colon. The pains and constipation that precede the disease belong to the various kinds of enterites; the bilious evacuations are found in the majority of cases of acute enteritis that are rapid in their march: the rapid failing in strength, the wandering pains in the legs, and even the cramps, are seen in many of them. The albuminous flakes, which we find in such abundance, and which give their white appearance to the stools, exist in nearly all anormal serous secretions; and even the blood, which is mixed with them in some cases, is merely a sanguineous exudation, which takes place at the termination of many hyper-secretions of serum. Certainly, we have here sufficient to justify the denomination of serous enteritis, which I propose to substitute in the place of cholera, a name which seems to me to be unjustifiable. Most truly, we meet with cases of this disease as rapidly fatal, as in cholera; but in them we do not meet with the same simultaneous existence of symptoms as in cholera: here they succeed each other with a certain regularity not to be found in cholera. The stage of

cyanosis which accompanies the cold stage of cholera, is generally seen without perspirations, and the cold is permanent until a crisis comes on, which definitely puts an end to it, and replaces it by a gentle warmth. In serous enteritis, the cold stage is accompanied by sweats, and offers frequent alternations, appearing and disappearing a certain number of times. In cholera, the lips are fuliginous, and the nostrils present that peculiar appearance denominated by French pathologists "*narines pulverulentes.*" As yet I have not seen their appearances in serous enteritis. Finally, in cholera there is suppression of urine, whilst in the disease now under consideration, the secretion continues.

Treatment.—The treatment, which I am in the habit of employing, and which has always succeeded most admirably in every case where the nervous symptoms do not predominate, and even often in this stage of the disease, is as follows: If it were necessary, I could invoke the testimony of seven or eight proprietors of large plantations, amongst whose slaves I have had numerous cases; and also, some of my medical brethren, who have adopted the same mode of treatment, at least the fundamental part of it, could bear witness to its efficacy:

R.—Red Oak bark, }
 Peruvian bark, } of each about 10 lbs.
 Water about 30 lbs.

Boil for half an hour, strain and keep for use.

The red oak is preferable, and the bark of both should be taken in preference from the trunk near the roots, and should be used fresh.

The above decoction forms the basis of my treatment, but the manner of administering it is of importance. The following is the plan I recommend.

As soon as I am called to a person suffering from this disease, I begin by giving a small injection of the cop. decoction, and administering half a tumbler by the mouth. In general, this first injection and dose are retained but a few minutes, as soon as they are rejected, I repeat the dose. This second dose is usually retained a quarter of an hour, and I continue repeating it three, four, or even five times, until the vomiting and purging cease. We generally find that each successive dose remains longer on the stomach, and in two instances only was I compelled to administer as many as six; often a single dose is sufficient.

By the above treatment the vomiting, if it had existed, is first arrested, and then the diarrhœa. Some hours after, the patient is often wholly cured; in a certain number of cases, the skin becomes hot and moist. If I find then that the pulse is quick, and especially if it is full, I bleed, even during the perspiration. Twenty-four hours after the arrest of the purging I give a pretty strong dose of some drastic purgative. I prefer the purgative of ieros (one table-spoonful and a half) and in addition, I make the patient drink every half hour, half a tumbler of the decoction.

Once the looseness of the bowels arrested, I act according to circumstances; according to the indications presented; bleeding, baths, sedative draughts, etc.

When not called upon till the cold stage has supervened, I give as above the oak decoction, but to produce reaction, heat of the skin and warm perspiration, administer every half hour a table-spoonful of the following mixture:

R.—Laudanum,	3ii.
Spts. of ammonia,	3iv.
Sugar,	3j.
Water,	3iij. M.

At the same time the patient is surrounded with hot bricks. (It is essential notwithstanding the cramps, not to use friction: the heat and sweating are more certain to remove them than friction,) and when reaction comes on, I generally bleed, and act according to indications.

Such, Sir, are the facts which I have observed; I regret that I have not time to add cases, taken at the bedside.

III.—CHOREA, with suppression of the Menses, treated successfully by Ammoniated Copper and Extract. Belladonna. By THOMAS E. EVANS, M. D.

Miss. J.—Ætat. 18.—Had for eighteen months previous to date, June 29th 1846, slight symptoms of chorea, which gradually increased until March 1846. She was then placed under the professional care of Dr. J. W. of this place. *Treatment*.—Bleeding, blisters to spine, mercurial course &c., steadily perserved in, until the above date, June 29th, at which time the case was abandoned by the above gentleman as hopeless, and her death declared certain.

June 29th.—Visited Miss J. for first time. Symptoms.—Countenance pale, anxious, sunken; breathing with considerable difficulty; spasms violent and constant, extending over the whole body, so that two persons had to be constantly employed to keep her on the bed; muscles of throat and tongue rigid, so much so, that speech and deglutition were both in a great measure suspended; bowels irregular; tongue slightly furred; pulse small and irregular, varying from 130 to 150; has not menstruated for twelve months; spinal column slightly tender and a little curved, probable by the constant spasms; usual period of catamenia 8th to 12th of the month,

R.—Ammon. cupri, gr. ss.

Ex. Gentian. grs. iij. M. ℥. pil. *ter die sumenda*.

Applicetur.—Emplast. hydrarg. ant tart. ad spina. R.—Aloes; sapo Castil. aa. M. ℥. divid. in pil. grs. iv. singul. quatuor pro re nata, nocte sumenda.

June 30th.—Less rigidity in the muscles of throat and tongue; has swallowed with more facility; can articulate indistinctly; bowels acted twice; skin moist. Slept some last night; spasms still continuous, but is more cheerful; prescription continued.

July 4th.—Improving steadily; can swallow and speak more plainly; complains of emplast. R.—Ammon. cupri, gr. ¾; ex. gent. grs. 5; *ter die*.

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Author

Fenner, E.D.

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